THE SIXTH YEARBOOK

OF THE

NATIONAL SOCIETY FOR THE SCIENTIFIC STUDY OF EDUCATION

PART I

VOCATIONAL STUDIES FOR COLLEGE ENTRANCE

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THE SIXTH YEARBOOK

I

VOCATIONAL SUBJECTS FOR COLLEGE ENTRANCE REQUIREMENTS

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COLLEGE ENTRANCE REQUIREMENTS: A LOOK BACKWARD

Progress in dealing with college entrance requirements for a hundred years should be to the student of education a cure for pessimism. Down to 1807 the standard requirements were Latin, Greek, and arithmetic, but in that year geography was added to the list, and later English grammar, algebra, geometry, and ancient history were included. The teaching of astronomy in college and school led to a recognition of this subject and finally in the first half of the period a general treatise on the physical and chemical sciences under the title of natural philosophy was also accepted.[1] Marked interest in the study of the natural sciences and the modern languages in the third quarter of the nineteenth century led to a recognition of these subjects as deserving a place in the studies for college admission.

The most valuable single discussion of secondary studies yet made was that by the conferences arranged through the Committee of Ten which conferences covered the general field of secondary work and gave us a valuable statement of educational values of subjects to be studied in secondary schools and somewhat of how these values can be realized. Probably no single piece of work has done so much to unify and correlate secondary education as has the famous report of the Committee of Ten. In 1899 a further committee on college admissions submitted a report to the National Educational Association which supplemented the report of the Com-

[1] Brown, *The Making of Our Middle Schools.*

mittee of Ten and formulated courses of study with more thought of their satisfying the requirements for college admission.

In the reports mentioned above there is clear evidence of the dominance of the college influence. But parallel with the movement that is evidenced in these reports there has been a marked growth of interest in more practical subjects of study that originally came from outside the sacred circle of college entrance studies. These subjects are now asking for recognition along with others which seek to prepare for study in higher institutions. The first marked tendency for vocational education in the secondary schools was the outcome of the Centennial Exhibition of 1876.

The striking results of European manual training schools were there represented in foreign educational exhibits. There was also embodied in the exhibits of the American states the material achievements of a hundred years. These two object lessons gave the impulse for a new educational propaganda, expressed in the motto: "Send the whole boy to school." Many of us remember the bitter controversy over manual training in the eighties, the attempts to discredit it by those high in educational influence, but we also note that manual training has steadily gained ground, that it is now recognized practically everywhere as sound educationally, and it has reached such a stage in development that it can reasonably request the higher institution more to generally recognize its educational worth by having it included in the list of subjects for which college admission is granted.

In the early eighties there began in a crude way the introduction of commercial studies in public and private high schools. The impulse for such an innovation was the competition of the private business school and the demand of communities that our secondary schools should not only give a good education but one also that is good for something. At first these commercial courses were abbreviated as to time and impoverished in curricula, but by lengthening them so that they are equal in time requirements with other courses of a similar grade and enriching them with more practical interpretations of older studies, and the introduction of new subject-matter in the way of applied economics and technical business subjects these commercial schools have been improved until they may fairly claim a place educationally with the other forms of high-school

education and they, as well as manual training, are making demands upon higher institutions for the admission of their students.

Lastly there is beginning to be felt the demand of special education for women. The pressure for recognition of domestic science or home economics courses may still be in the future, but it is as inevitable that the demand for these courses will be made as it is that they will become a recognized part of our education for girls.

RELATIONS OF THE COLLEGE AND THE SCHOOL

Undue credit for the influence of the college on the school has been assumed by the college authorities. The high school, as has been pointed out by the recognized authority on the history of these schools, was originally the extension upwards of the elementary school, and its policies have been formulated by the educational forces below it and by the demands of the community outside of the school as well as by the insistence of the college authorities upon a certain requirement for admission. The Committee of Ten termed the proportion of secondary pupils going to college as insignificant, but more striking than this is the fact that despite the pressure of the colleges, the pupils in the distinctively preparatory courses have not increased relatively with the increase of those not perparing for college. This statement is true for both public and private schools. In 1892–93 the percentage of those preparing for college in public high schools was 14.6. Eleven years later the percentage of those so preparing in the same schools was 9.54. In the private schools for the same period the percentage had fallen from 26.5 to 21.47[2]

The seventh question propounded for the several conferences in connection with the Committee of Ten's report was: Shall subjects be taught differently to pupils who are going to colleges, to those who are going to a scientific school, and to those who presumably will not enter upon higher studies? In the letter of transmission the Committee says that this question was answered unanimously in the negative. The answer to this question, however, provoked much discussion and called forth dissent. For instance, one writer attempted to show that the question was answered with-

[2] Brown, *The Making of Our Middle Schools*, p. 418; *Report of U. S. Commissioner of Education, 1904*, Vol. I, pp. xvii, xviii.

out being understood.[8] The interpretation has been made that those who answered meant to say that college preparatory work is the best work that could be furnished in the secondary schools and there is still a general opinion for which no doubt the college influence is responsible, that the best education which can be given in the schools is of the traditional college entrance type and that as many as possible of the pupils should be led to take this kind of education even though they do not go to college. We shall no doubt ultimately come to an acceptance of the unanimous answer of the Committee of Ten's conferences though perhaps not in the way all the conference meant the answer, certainly not in the way that some have interpreted both the question and the answer. But we shall accept it rather as a statement of the idea that the business of the school is to furnish education and that it should devote itself to this business for all who come to it for instruction regardless of their ultimate destination being attendance at a college.

THE ENDS OF COLLEGE ENTRANCE TESTS

We may well ask the question of Mr. Prettyman's paper in the following collection, do college entrance requirements signify subjects or power? If subjects there is little to be said, but if power then vocational education is entitled to a hearing. And let us also remember that power is to be expressed in feeling and action as well as in thought. One claim of practical studies worthy of consideration is that they relate thought to action. In formulating and enforcing the entrance requirement due regard should be given to the quality and temper of students, their attitude and capacity; if this be not so the colleges will be taking the symbol for the thing symbolized, the form for the spirit. Some of us cannot get away from the conclusion that what the colleges should ask is not a particular "brand" of knowledge but the evidence of maturity of mind and seriousness of purpose on the part of those who seek admission.

Miss Mary E. Haskell in a recent investigation of examinations for non-college going girls was led into a consideration of the training of the girls who go and those who do not go to college. The conclusion was inevitable that there should be less difference than there now is in the treatment of these two classes of pupils. The sug-

[8] Butler, *Educational Review*, December, 1896.

gested way to secure uniformity is also as we might have expected. It is by giving less of college entrance education and more of education. Miss Haskell reports that in her correspondence with schools fitting for college she found a very general evidence of the feeling that college entrance requirements could be modified with gains to the pupils going to college and she reaches the conclusion, "we feel so much certain hamperings over our work with the college preparatory girls that we are very desirous, for their sakes as well as for the larger body of girls who do not go to college, that a modification should be brought about in the college entrance requirements." [4]

The suggestion of Professor de Laguna's paper which follows appears a fair way out of the present difficulty when taken in connection with the admission requirements of the University of Michigan. But these requirements differ widely from the practice in general, and particularly so from that in the East. The attempt to follow both general and vocational studies at one time is almost sure to lead to overloading the curriculum which will result in lowering the educational results for all the studies. As the requirements for college admission are now pretty generally enforced it is only the student of special ability in the vocational schools that is able to secure admission for advanced study, or he secures this admission with a heavy disability because of conditions. Harvard's entrance requirements themselves stagger the average student in the secondary school and put him to the test of his best endeavor for four years without any side issues by way of vocational subjects.

The present differences between the practices of the East and the Middle West are fairly shown by comparing the demands made in the paper of Mr. Holmes with the entrance requirements of the University of Michigan as set forth by Professor de Laguna. May it not be that the liberalizing of entrance requirements with the recognition of more modern and more practical studies will come from the democratic community institutions of the Middle West and that the institutions in other sections of the country will be led to an acceptance of the practice after its workings have been demonstrated. We may grant the validity of Professor de Laguna's argu-

[4] *School Review*, December, 1906.

ment but his premises lay an obligation for a very general modification in our practices with regard to college admission in the country at large.

AIMS OF SECONDARY EDUCATION

In any discussion of secondary education or college admissions we should keep clearly before us the threefold purposes of the middle schools as they have been set forth by the present United States Commissioner of Education. These purposes are: first, a better adjustment of the middle schools to the schools that are above and below them; second, a better adjustment of these schools to the capacities of their students; and third, a better adjustment of them to the changing needs of our societies. We may, I think, raise the reasonable question whether the first part of the first aim has not exercised an undue influence over the secondary schools. Some years ago a university president, speaking to a company of schoolmen declared that a system of education should be like a pyramid which all the way down takes its shape and its proportions from the apex. His suggested apex is the university, but we are coming to believe that the stone at the apex is to be influenced by the foundations and the other parts of the structure and is not to give its own shape and direction to the whole. Elementary school, middle school, and higher school should find a harmonious balance one with the other and all must be influenced by, as they should in turn influence, our civilization; and finally we cannot emphasize too strongly that schools and courses, college entrance requirements and vocational studies exist for pupils and not pupils for them.

There will be general approval of the Committee of Ten's declaration that secondary schools are not primarily for the preparation of students to pass special examinations for college admission. Instead, their chief purpose should be to prepare girls and boys for the duties of life. The Committee was direct in the statement that the preparation of students for colleges and scientific schools should be for the average secondary school an incidental and not the main object, but the report recognizes the logical deduction from this fact and passes on to say: "It is obviously desirable that the college and the scientific school should be accessible to all boys or girls who have completed creditably the secondary school course." If this were not

true, then early in the life of the child his educational future, probable destination, and sphere in life are fixed for him and fixed in an accidental and arbitrary manner without taking his own traits and predilections into consideration. There can be no gainsaying that any successful graduate of a secondary school should be eligible for studies in our higher institutions of learning "no matter what group of subjects he may have mainly devoted himself to in the secondary schools."

This was the doctrine of the Committee of Ten's report and by this doctrine we should stand. The natural outcome of the acceptance of this course is to make our vocational schools and courses of true educational worth equal in time and corresponding in the demands which they make with the other forms of secondary education.

Education may set for itself such ideals as the cultivation of intellectual power, and, what is more difficult, the acquisition of the ability to apply power to the matter in hand. If our curricula were made in accordance with these principles, the training of secondary schools will render the double service of making subjects of instruction more practical, and practical affairs more intellectual. We have long had two educational ideals that have existed side by side, but have not intermingled; these are the academic and the apprenticeship. The former earlier gave scholasticism, the classical school; the latter, utilitarianism in education, the workshop. But the old division of studies into educational but not useful, and useful but not educational, is fast disappearing. The useful is found to be intellectual, and much that was hitherto thought to have educational interest only has been shown to have increasing usefulness. At present, three sets of interests at least make demands upon the secondary schools. These are professional or literary, industrial, and commercial. If the demands of these are rationally met and if high schools are properly co-ordinated with the elementary school on the one hand and the universities on the other, we shall have realized somewhat Huxley's ideal of an educational ladder reaching from the primary school to the university. Let this ladder be wide enough to accommodate all who want to ascend it, and let the meaning and the probable rewards of ascent be such that a larger number will want to go up. Practical schools and courses will add to the

number who go through the secondary schools, and this in turn may be made the means of increasing the number who go to higher institutions.

THE OBLIGATION OF THE COLLEGE

The college cannot afford to be an institution apart from the modern school. Our present United States Commissioner of Education has emphasized the thought that our secondary education is indigenous, an expression of the social life of the American people. The number and character of secondary schools is a reflex of our civilization; public high schools are peculiarly the institutions of the people. In several senses these schools are middle schools, but most important they are the meeting place for various classes of our democratic society. Here classes may mingle and learn each of the other.

Certain fundamentals are coming to pass almost by common consent in our educational creed. One of these is that the school is one form of activity in the present social order—society expressing itself in a given way; and another that it is the business of the school to induct men into institutional life, not of the remote past, but of the present. This means of course that we are to treasure and stimulate interest in our historic civilization, but the latter is not the sole, not indeed the chief, purpose of education. More than any other institution the college has set itself aside from modern society both in its own work and in the requirements it fixes for admission. In consequence the college is losing its opportunity to render the largest service both in preserving the traditions of culture and in leavening the whole lump of modern society.

With certain rather cynical remarks made of late that we do not need more students going to college, that there may be too many now taking the higher education, etc., we should have little patience. Of purposeless educational dilettanteism we cannot have too little, and this is one of the results of the traditional college entrance test and a higher education that leads nowhither; of that definite education that relates the training given and the life to be led we cannot have too much, and this is the result of the vocational aims of education. The college owes a debt to society that up to this time it has come far short of paying; more narrowly the college owes some-

thing by way of recognition and inspiration to the secondary institutions that seek to serve community needs. The college owes recognition to that boy or girl who after worthily completing the studies of the vocational school asks for the privilege of further education.

When colleges and universities widen their system of credits or entrance requirements, and touch the schools at more points, the questions of dealing justly with the vocational schools and their students will settle itself. As the instruction within the university is modernized, it becomes easier to recognize modern subjects in the secondary schools. Would not a proper course for the higher institutions be, not to refuse to consider the newer subjects of the vocational school, but by rigid insistance on meritorious work in them help to make these subjects of greater value to those who do and to those who do not wish to go to college?

But of all things most to be desired, let those in the schools escape from the bugaboo of getting into college in a particular way. The boy fitted for getting into life ought not to be thereby incapacitated for getting into college, and if he is, there is something wrong with the college requirements. First let there be schools giving real education—classical, English, manual training, and commercial, and then let the colleges welcome students from any and all of these schools. It is manifestly unfair to compel all students to take a special course for college admission when a small portion go to college; it would be just as unfair to deny college admission to those who have not taken the required course, but who find that at the close of their high-school work that they have the inclination to go to college and that a way has opened for them to do so.

II

EDUCATION VERSUS COLLEGE ENTRANCE REQUIREMENTS

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DUTY OF THE COLLEGE TO THE STATE

Democracy has not yet revealed its full meaning. The grounds of the democratic faith lie too deep to be patent; with every fresh study of them comes new insight into their profundity, and with every attempted application a new conception of their logical effects. We have recently seen the insurance companies taught the lesson of democratic responsibility; the railroads and the packers are studying the same text; and it would seem that holders of colossal fortunes may soon be forced to think carefully about the nature of private property in a democratic society. "Mutualization" is a sign of the times, pointing into untraveled depths of democratic theory.

Education is not exempt from this new activity of republican thought. A highly suggestive study of republican principles bases them upon a conception of man as a free spiritual agent, whose true life is in his main spiritual relations.[1] Among many consequences, dimly seen, of such a conception, there is one, at least, which will be clear to the educator; a democratic society owes to each of the individuals which compose it *all* the education, and *that sort* of education for which as a free spiritual agent in the relation of citizen he has the capacity and the need. This deduction, familiar to many of us as it may be, is far enough from the popular idea of the educational duty of the democratic state to prove that democracy has revelations yet in store.

But in America the democratic faith is strong. Self-government has proved to be only a primary duty. We early inaugurated elementary education, free to all and for all alike the best obtainable.

[1] Joseph Lee, *Charity and Democracy*, Charities and the Commons, xvii. 9, Dec. '06, p. 392.

The free public high school is now firmly established, and public sentiment is quick to support the new schools designed to meet special educational needs. Some states offer free collegiate courses, including, besides traditional liberal culture, professional training of university grade. The democratic faith, strongest in educators, may yet lead us to demand of every commonwealth the fulfillment of its whole educational duty;—free higher education, both general and vocational, may yet be universally offered. Be this as it may—it would lead us far afield were we to discuss all that the state may here properly undertake—we may with some confidence appeal to the educator as democrat in favor of a thesis concerning the admission requirements of the college in a democracy. For the educator as democrat will at least recognize the responsibility of the college to the community. He may not be ready to argue for free university instruction, much less for free law schools, but he will admit that the college, like the railroad and the insurance company, should serve the whole public fairly and without respect to persons. He will agree that the college should try to meet every reasonable need of the community it serves. He will agree that it should be quick to recognize a worthy educational demand. In the light of this responsibility to the community, the contention we shall here maintain will not seem overdrawn: college requirements must not operate to debar from higher education any class which has received a secondary education adequate in its grade as a preparation for citizenship.

DUTY OF THE COLLEGE TO THE INDIVIDUAL

But education is Janus-faced; it looks both to the state and to the individual. Not only has the college a responsibility to the community; it has also a responsibility to the possible pre-collegiate instruction of every educable person. To education as a vital personal process that is, the college owes a duty. The college must guard the American principle of equality of opportunity. Class education is rightly, in America, abhorrent. We say to the humblest, "What is open to any, shall be open to you." We have gone far towards providing, at public expense, for the poorest, all that the richest can buy. In this light, college entrance examinations should not be a gate to which only the elect are given the key, but should rather

be a ladder, which all who are strong enough may climb. For education cannot properly be represented by any closed series of parts; it is not properly divisible into one kind which ends at 14, another which ends at 18, and another which ends at 22. The German idea of a kind of schooling, complete at a certain stage, to which each member of a class is foredoomed, is forever impossible in America. We hold education to be an open sea, upon which everyone may sail as far as the winds of his fortune will carry him; or, we look upon it, rather, as a single vital process, the whole virtue of which is the birthright of every citizen. It may be that he will be forced to sell it for a mess of pottage; but in any case it must not be denied him, even in part, while he is still ready to accept it. The whole process, let us note, is his birthright; if he has passed to proper purpose through one stage of it, the next should lie ready to his efforts. As teachers, surely, we should be loth to narrow the path of the pupil, to obstruct it, to turn it whither the pupil can not travel while he has still the will to go forward, or to exact of him a toll he is not able to pay. Once more, from the point of view of the responsibility of the college for the previous training of the individual: college requirements must not operate to debar from higher education any individual who has received a secondary education adequate in its grade to his needs as a man.

INFLUENCE OF THE COLLEGES UPON THE SCHOOLS

Of course we have not the temerity to imply that those who frame college entrance requirements are unmindful of the responsibilities upon which we have dwelt. There seems, indeed, to be a general willingness on the part of the colleges to acknowledge their influence upon secondary school programs. In the conscious exercise of this influence the college authorities no doubt set before themselves the dual ideal of service to the whole community and of guardianship over the integrity of the educational process. So long as there was but one kind of secondary education, the problem was simple enough; but with the introduction of the elective principle complications arose in abundance. Now we have before us the spectacle of secondary schools of special vocational character and of general high schools whose programs are divided into courses constructed to meet special needs,—an ever increasing number of verti-

cal divisions (if the figure may be permitted) of secondary education. It is not this sort of division, of course, against which we have just been contending. College requirements have not created the special schools; they have not drawn the "vertical" lines of cleavage. But the special schools are here, and the college problem is no longer simple.

Fortunately, we shall not here be obliged to take sides upon the exact issue of our problem of electives; enough for the moment if we state our belief in the general principle of education according to needs. We are quite ready to agree that this vertical division should not be carried too far, that it should be guarded by consideration of the interests of the community on the one hand, and of the integrity of the educational process on the other; but if vertical divisions are thus carefully made, we cannot admit that the "horizontal" bar should be raised by external influence upon any of them. The dead stop upon the educational path of any pupil should be raised only at the limit of his capacity. But just here comes in the practical question. If college requirements do not accord with the training supplied in the vocational schools then the training in these schools is educationally a path into the desert. If colleges will not provide for the continuance of vocational education, they stop that education at eighteen. If vocational schools are not recognized, then our "vertical" division has in effect a "horizontal" bar placed upon it by the colleges. The problem of admission requirements can no longer be settled by preparing examinations in the classics and in mathematics.

ATTITUDE OF THE COLLEGE TOWARD THE VOCATIONAL SCHOOL

Our premises, of course, remain to be proved. It may be that we do not supply in our special schools a training adequate as a preparation for citizenship; it may be that our training is too narrow for the needs of the individual as a man, as a free spiritual agent. Let not this obscure the point in question. We assert that our training is thus adequate, upon both counts. The colleges must meet us upon our own ground. If a college will confess that it accepts only intending divinity students, it may narrow its requirements as it pleases, with injury only to itself and to the divinity students. But if a college pretends to supply higher education of a

liberal character; if it is prepared to send its graduates into every activity of modern life; if it is, in short, a true American college; then it must fit its requirements to every proper function of American secondary education. Its requirements then become an authoritative definition of the functions of secondary education. If it will not accept graduates of vocational schools, it asserts that our training is class training. We reply that the refusal of the college to accept graduates of certain forms of high schools convicts the college itself of class training. Either these schools are too narrow, or the college is. If we claim for pupils of the vocational schools the right to continue their studies in college, the colleges cannot deny them that right by reason of special requirements for admission, without taking a stand against our form of secondary education.

Let us suppose, for example, that a graduate of the Boston High School of Commerce finds that he cannot enter X college. What is he to think? He may believe that his training has not been adequate in its grade as a preparation for citizenship. In this case, the college is guarding the democracy against a class of citizens which, without proper preparation, would yet enter the life of the community under the authority of the college degree. The college must discourage an unjustified pretension to adequate training for the great relation of citizenship. Or, our graduate may believe that his training has not been adequate to his needs as a man. In this case, the college is guarding the integrity of education as a vital personal process. It must not admit to the opportunity of higher education a pupil who has not received a training for manhood. Or, our supposed graduate may take the other point of view. He may believe that the college wishes to serve the needs of only a single class in the community; he may look upon its narrow requirements as evidence that the college will not recognize all reasonable demands, from whatever class; he may feel that the college is forgetting its duty to a democratic society. He may believe, moreover, that the college refuses to recognize a worthy function of secondary education; that it casts a stigma upon a form of secondary training which has supplied in its grade all his needs as a man, as well as some of his needs as a worker; he may feel that the college is forgetting its duty to him as an individual. This is the issue.

AIMS OF SECONDARY EDUCATION

To support our graduate in one opinion or the other, let us ask ourselves first what the functions of secondary education are. Upon this point, let us admit, we can here do little but present our convictions as clearly and convincingly as possible, and state our authorities. If the exposition is attacked, the argument will demand volumes. For the present we must content ourselves with a broad, firm confession of faith. First, then, we accept Herbert Spencer's working definition of education as preparation for complete living. Following Professor Hanus of Harvard University, we define preparation as participation, and complete living as usefulness and happiness. Under the same authority[2] we define the special function of the secondary school as "comprising three classes of aims: namely, vocational aims, social aims, and culture aims." A modern secondary school should graduate pupils who can, *first,* earn their own livings; *second,* discharge their duties as citizens; *third,* participate in the refined pleasures of modern life. If there are other aims of secondary education which cannot be brought within the scope of this statement, we do not know of them. We believe that every widely accepted, *practical* formulation of the aims of secondary schools in America is implicit in this one. Philosophical refinements upon these conceptions may of course be made; but in the practical outcome we may rest our case upon these grounds. The youth whose training has been dominated by these aims has laid a foundation for usefulness and happiness.

Two phases of education as we have defined it may attract attention. It is presented as a training for *active* life, and as a training for *modern* life. Let it not be supposed, however, that we are pleading for a commercial ideal. The activities of modern life are legion. We are not attempting to formulate a philosophy of commercial secondary education any more than a philosophy of classical secondary education. Both can find an appropriate place under our definitions; we ask only the same grace for both and an equally cordial welcome at the college doors. For to us, it seems obvious that the classical school is as much a special school as the school of commerce or the school of mechanic arts. We would make the powers

[2] *A Modern School,* by Paul H. Hanus, Macmillan Co.: 1904, p. 16.

of the pupil "subservient to life's serious purposes," among which the purposes of the scholar rank high. But they are special purposes, comparable to those of the business man or those of the engineer. We applaud classical training as a preparation for divinity, for the law, or for other special activities in which it may be applied. But we deny that it is the sole form of liberal training; we deny, indeed, that in itself it is a form of liberal training at all. Neither do we contend that any form of vocational education is, as such, a form of liberal training. Any form of secondary instruction may at least lay the foundation of a liberal education, if it adequately subserves the three essential aims of a modern school. For these aims include both a liberal aspect of education and a special aspect of education. No man can be useful unless he is master of some form of activity in the life of his day. He cannot be prepared to earn his living, nor to serve the state, nor to participate in the refined pleasures of life, unless he is in some degree a specialist. He must have his own field to till; his own point of vantage; the ground, longed for of old by Archimedes, from which to move the world. Neither can he be truly an educated man without the liberal form of training. He may earn his own living, but he cannot be of wide usefulness, nor find high sources of happiness in life, unless he has laid the foundations of general culture. In our devotion to this ideal of general culture, we do not yield, despite our special aim, to the advocate of any form of secondary training whatsoever.

For practical purposes, then, we may say that the triple aim of secondary education may be subserved by putting into effect these two general aspects—the aspect of mastery in a serious activity of modern life, and the aspect of liberal culture. It would profit us little to enter now into a theoretic consideration of the exact relation of these aspects to vocational, social, and culture aims, or to the ideals of usefulness and of happiness. Those aims must dominate, those ideals must permeate, the work of a school which consciously endeavors to give effect to these two aspects of secondary education. The teachers in such a school will feel constantly the pressure of a double duty, that of preparing their pupils to do something well and to enter intelligently and helpfully into the life of their day. There is no hint here of the old ideal of cultured leisure, the *diagoge*

of the Greeks. A modern school prepares its pupils for active, modern life. But it does not disregard the ideal of general culture.

What, then, is general culture? It is the capacity to understand, appreciate, and react upon the resources and problems of modern civilization.[8] If anyone will have it that general culture is something else or something more than this, from him we must part company. We have made our confession of faith. The development of this capacity is the foundation aspect of secondary education as the vocational schools endeavor to supply it. With the other aspect, the mastery aspect, it completes secondary education as we believe the colleges should recognize it. If any school will put these two aspects of secondary education into effect, we claim for its graduates the right to go forward into the field of higher education without let or hindrance.

HOW THE AIMS OF SECONDARY EDUCATION SHALL BE REALIZED

To compass the application of these principles, what must the secondary school attempt? It must attempt three things. *First,* it must lay the foundations of general culture by giving to the pupil a thorough acquaintance with (*a*) the kinds of data, (*b*) the mental processes involved, (*c*) the ideals presented, and (*d*) the applications possible in *all the distinct main branches* of modern knowledge. In this provision we are contending for the foundation aspect of secondary education. We may as well at once confess, as later it will become apparent, that we do not hold any specific subject—unless the Mother Tongue be such—as essential to liberal culture. If any substantial scientific subject, for instance, is properly taught, it will give to the pupil the necessary acquaintance with the kind of data, the mental processes, the ideals and the applications involved in scientific study. Nor will our list of specific subjects include a subject, such as common geography, which comes properly within the field of elementary education; nor one, such as comparative philology, which is beyond the grasp of high school pupils. But, *second,* it must not waste the pupils' time in work which is not carried far enough to yield the acquaintance we have postulated as desirable; nor must it carry special work so far as to exclude acquaintance with any "great branch." Yet, *third,* it must offer to each pupil the opportunity to carry to a reasonable point of mastery

[8] Hanus, *op. cit.*, p. 26.

that special branch in which lie his dominant interests and powers. It can be seen that in thus giving effect to the two aspects of secondary education, that of foundation and that of mastery, the secondary school is fulfilling our conception of its particular function. Vocational, social, and culture aims are subserved; usefulness and happiness may be founded upon a training thus planned. No essential purpose of education, in other words, is ignored. We are willing, therefore, to present these principles as our educational *Institutio*. Upon it we profess to base our educational conduct. If our courses of study are the just application of our philosophy, the colleges must accept our graduates, or confound us in our heresies.

EFFECT OF COLLEGE REQUIREMENTS ON THE CHOICE OF HIGH SCHOOL SUBJECTS

But the effect of any philosophy may be perverted by practical misjudgments as to means. It is in the influence of college requirements upon the actual choice of secondary subjects that we find our grievance. How should our doctrines be applied; what actual application do we ask the colleges to meet? If the college authorities hold the formal discipline theory, their requirements would of course not fit our training. For it is hard to see how an acquaintance with all the main branches of knowledge can be gained from a study of a single, specific subject or groups of subjects, or how the dominant interests and powers of every pupil can be turned to account in a system which recognizes no mastery but mastery in the classics or in mathematics. It is like trying to get the varied virtue of a seven-course dinner by eating a great deal of the fillet of beef. But we must part company with the formal disciplinarians without further argument. We cannot accept their dogma as a basis for a rational system of secondary instruction. What virtue we find in it we shall be glad to acknowledge, but we hope that its advocates grow ever fewer and fewer.

Other college influences upon the choice of secondary studies we must hold to be equally fatal, if based upon a less pernicious doctrine. There are sins of omission as well as sins of commission. College authorities may frame their requirements without regard to three principles which may be easily deduced from our theory of secondary training. *First*, they may not require examinations in every branch

essential to the foundation aspect of culture. *Second,* they may not offer advanced examinations in subjects in which many pupils may reasonably specialize. *Third,* they may attach such importance to the examinations in a single subject as to make it stand, improperly, on a level with the main branches of knowledge.

EIGHT DIVISIONS OF SECONDARY SCHOOL SUBJECTS

These main branches of knowledge are, in our opinion, to be classified as follows: *first,* ENGLISH, including both composition and literature; *second,* FOREIGN LANGUAGES, both ancient and modern; *third,* NATURAL SCIENCE; *fourth,* POLITICAL and SOCIAL SCIENCE, including civics, descriptive economics, and commercial subjects; *fifth,* MATHEMATICS; *sixth,* HISTORY; *seventh,* ART; *eighth,* MANUAL TRAINING, including mechanical drawing and shop-work. By means of instruction in these branches we would give effect to our dual ideal of secondary education. They form the field of secondary education as we would at present bound it.

In the light of our dual ideal it can be seen that any particular subject included under one of these branches can be used to effect either of two purposes. It can be taught as a means to general culture, or it can be taught as offering a reasonable field for the activity of a pupil's dominant powers. According to the view of any particular subject adopted by the college, an examination in that subject should either be offered, or required. But we must here repeat that we hold general culture to be embodied not in knowledge of specific subjects, but in an acquaintance with the characteristics of each of the great departments of knowledge. The only specific subject, therefore, which we would willingly require in college entrance examinations or demand of all secondary schools is English. The reasons for this exception are obvious. Another possible exception may be made in favor of Algebra and Plane Geometry. If these specific subjects are required, it must be upon the ground that in them, and in them only, the essential character of pure mathematics can be displayed to beginners. But we would require, not an examination in physics, but the presentation of a certain amount of science. In Foreign Languages we would require a definite amount of Latin *or* Greek *or* French *or* German *or* Spanish. The equivalence between the amount prescribed in Latin and that prescribed in

German is not here at issue. The principle for which we contend is that of choice. Language, not Latin, should be required. We commit ourselves, therefore, to this opinion: The influence of college requirements is against liberal culture when a test in a specific subject is required in place of an option designed to test the familiarity of the candidate with the elements of a general department of knowledge. It follows that we cannot condemn any secondary school as illiberal on the ground that it does not present this or that specific subject.

Certain qualifying views may now be presented. We would add to our list Physical Training, and would grant to its advocates the possibility that in time the colleges may find it necessary to subject every candidate to a physical examination. We should be glad to see more rational and more searching requirements in this subject adopted in all secondary schools. We should not now advocate, on the other hand, any requirement in Manual Training nor in Art. The elements of these branches should be presented in the primary and grammar schools. High-school instruction in them we are now inclined to place in the category of special instruction, in which any pupil may reasonably choose to exercise his dominant powers; as subjects to be offered under the mastery aspect of secondary education they may therefore be pursued as far as the pupil can go consistently with his acquirement of liberal culture. The college should consequently offer, but not require, examinations in reasonably advanced forms of Manual Training and of Art. This leads us without further discussion to the proposition that the college should offer (not require) advanced examinations in any specific subjects which may reasonably be taught under the mastery aspect of secondary education.

TEST OF EDUCATIONAL VALUES

We have now attempted to present certain principles upon which the college should determine what subjects to require and what to offer. These we have based upon our theory of secondary education. The question of the relative weight to be given to various subjects remains to be treated. In this matter we have a partial concession to make to the formal disciplinarians. The relative educational value of different subjects may be determined upon

four grounds. *First,* a subject may have value because its data can be put to practical use. This sort of value attaches to the multiplication table, and to the data of many vocational subjects. Considered apart from other values it is not of the greatest educational importance. But it is to be noted that it does not vitiate other values; indeed, when combined with them it should add weight to the subject. *Second,* a subject may have value for the ideals it presents. If the pursuit of such subjects as literature and history inculcate sound ethical and aesthetic judgments, strengthen high moral incentives, and exercise the power of moral insight, those subjects are of supreme importance. This sort of value should therefore be taken into account in determining the weight of specific examinations. But this sort of value is hard to convey and harder to test in examination. *Third,* a subject may have conventional value. As we do not wish to be made conspicuous by peculiarities of dress, so we do not wish to be conspicuous because we do not know when Shakespeare lived or who discovered the laws of motion. This sort of value should neither be ignored nor overestimated. *Fourth,* a subject may be of value because it exercises vigorously all the powers its data call into play. This may be called the work-value of a subject. Latin, for instance, exercises the powers called forth by linguistic data to a greater extent than does French. Algebra calls for greater exercise of the power to handle abstract values than does Arithmetic. Chemistry exercises certain powers of observation; History, certain powers of generalization. So much let us grant to the formal disciplinarians; so much, but not more. We see only what we are trained to see. The powers of observation trained in Chemistry will not help us to observe stock-quotations, nor to notice delicate shades in human character. Power to deal with Latin roots will not help us to decide the artistic significance of Mr. Whistler's portrait of Carlyle, nor to frame a judgment upon the taking of rebates. Latin, therefore, may be given greater weight upon this count than French, but cannot be thus compared with Drawing or with Economics. All four of these values should therefore be taken into consideration in determining the weight to be attached to a given subject. But as between different groups of subjects—as between History, let us say, and Mathematics—it is obvious that the fourth sort of value will play a smaller part in

determining relative weights. For History and Mathematics exercise the intellectual powers in very different ways. A great deal of Mathematics, or a little very hard Mathematics will not increase in the pupil the power to deal with historical data nor strengthen in him ethical judgments. The second sort of value must here come into strong play. The scope, kind, strength, and permanence of the *incentives* to activity, and the kind, degree, and permanence of the *power* to think and to execute have been stated by Professor Hanus as the factors in this sort of a problem in values.[4] We fear that in some college decisions these factors have had no effect; the product seems to be the result of multiplying x of work-value by x cube of conventional value.

FAIR REQUIREMENT FOR ENTRANCE TO COLLEGE

What now is the specific outcome of these general principles? It can be presented under two heads. *First,* to hold the secondary school to its duty of supplying a foundation for liberal culture, we would have the college require each candidate to present (1) English, (2) a Foreign Language, ancient or modern, (3) a prescribed amount of Natural Science, (4) a prescribed amount of Political Science, (5) Algebra and Plane Geometry, (6) a prescribed amount of History. It will be noticed that we have prescribed no specific subjects except English and Elementary Mathematics. In the latter case we give the subject the benefit of a doubt which we are frank to confess. But we feel that it cannot then be maintained that a candidate who can satisfy his examiners on the points we have specified has missed the foundations of general culture. How much language, it may be asked, do you advocate? Upon so specific an application all that can be presented is a personal judgment. Under the general principle that enough should be required to assure to the pupil at least the full work-value of every subject, by which we may be certain that he knows the character of the data involved, we should stipulate for Latin, through Caesar; for Greek, through Xenophon; for a modern language, both the elementary and the intermediate examinations, if not the advanced. In Natural Science, we should stipulate Elementary Physics, or

[4] *Educational Aims and Educational Values,* by P. H. Hanus, Macmillan Co.: 1900, pp. 7.

Elementary Chemistry, or two other elementary sciences. Under this head it may further be noted that the college is called upon to offer examinations of elementary grade in every subject which can properly be studied in a secondary school. In the Political Science field, for instance, there should be a minimum requirement, and additional aspects of the subject as optional. We cannot here review the arguments for these subjects (they are ably presented by President Edmund J. James in the annals of the American Academy of Political and Social Sciences for November, 1897); but it must be clear that a youth unacquainted with the nature of economic data has missed modern culture. Until the instruction in this field has been more clearly formulated it would be difficult for one not an economist to be more definite; but even to the laymen it is obvious that something should be done. The college requirements should cover every specific subject in which a student may properly present himself in satisfaction of the general requirement of liberal culture. *Second,* the college should offer an advanced examination in every subject in which the student may reasonably specialize in the six fields enumerated above and in the two additional fields of Manual Training and of Art. Reasonable specialization has been defined as specialization which does not interfere with the acquirement of general culture. Essentially, this is a question for the individual. The college must strike a fair balance. It seems to us that the traditional requirement in Vergil is all that can be compassed by way of proper specialization in Latin. In modern languages, the usual advanced examination, made somewhat more severe, is all that can be asked. In Natural Science, we should expect to find advanced Physics. Advanced Chemistry seems to be somewhat beyond the possibilities of most secondary schools. Considerations of expediency are not, of course, within the scope of an argument of this kind; we can demand of neither school nor college what it would gladly do, but for lack of means cannot.

NATURE OF COLLEGE ENTRANCE EXAMINATIONS

There is now one further consideration. Of what *kind* shall college examinations be? It has been laid down by the Committee of Ten that "every subject which is taught at all in a secondary school should be taught in the same way and to the same extent to

every pupil so long as he pursues it, no matter what the probable destination of the pupil may be, or at what point his education is to cease." President Eliot has defended this proposition[5] so ably that one is with difficulty forced to admit that he disagrees with the affirmation of a body so authoritative with an advocate so distinguished. A solution of the difficulty may yet be found. At present, however, the point at issue may be illustrated as follows: We wish to give to the students in our commercial high schools a practical knowledge, let us say, of German. We wish to train them to speak the language. In so doing, we do not intend to ignore German literature; we wish, indeed, to have them read as much German literature as we have time for, provided such reading does not prevent us from teaching our pupils to *talk everyday German*. We cannot afford to send them out with a vocabulary composed mainly of poetic forms. It follows, of course, that we cannot teach only Heine, Schiller, and Goethe. But if the colleges insist upon the literary aspect of the language, our pupils are placed at a disadvantage. Very likely they could pass the examination, after a fashion. But that is not the point. The Latin School pupils, without half our allowance for German, could pass it more easily. Is our German not as valuable as theirs? Does it not give our pupils all the virtue of German as a language? We have seen the matter through green glasses; they have seen it through blue. It is so throughout the list. We have taught Physics with an eye to its commercial applications; not superficially, we trust, but as those who would prepare for life by participating in it. What, then, is to be done? As special pleaders, we must advocate a form of examination which tests with exactness the candidate's grasp of the principles involved in the subject, but which does not require him to have a special knowledge of purely academic applications of it. Let us hasten to deny that we wish to avoid getting the full *educational* value out of every subject: we want its work value and its value as conveyor of ideals; but as between a practical value and a conventional value we ask to be given credit for choosing the former.

[5] *Educational Review*, xxx, 4, Nov. 1905, p. 325.

EFFECT OF COLLEGE REQUIREMENTS ON HIGH SCHOOL TEACHING

We have now tried to make a broad application of our philosophy of secondary education and to indicate the way in which we believe the colleges should meet us. Let it not be supposed that we think the problems of secondary education settled, or capable of being settled. It may be that experience will prove that Manual Training is an indispensable element of general culture or that Algebra is not essential. Experience must be our final court of appeal. But we hold that the college which still insists upon Latin, Greek, and Mathematics as the *sine quâ non* of admission is not helping the secondary school to work out its salvation and may possibly be blind to its own. For the college cannot afford to wait until instruction in secondary economics (for instance) is efficient before it puts that subject upon its list of elective examinations. If it will put the subject on the list and set a searching examination in it, good instruction will be forthcoming, and with good instruction the value of the subject as an educational agent is immediately increased. If a college will not train teachers, it may at least create a demand for good teaching.

PRESENT PRACTICE IN COLLEGE ADMISSION

In spite of the fact that we do not profess a well-defined opinion upon every specific problem within the range of this discussion, it will be interesting to note how the present, actual state of college requirements squares with the principles in which we have confessed our belief. The writer has made a study of the entrance requirements of twenty colleges, the results of which he here with some diffidence presents. The colleges selected represent every section of the country except the South; they include all the great universities of the East and West, a number of state universities and several so-called small colleges. Anyone who is at all familiar with college catalogues must surmise that the data gathered form something of a labyrinth. We shall try to make our conclusions clear and we trust we have avoided large inaccuracies. Let it be said by way of explanation that the requirements of these twenty colleges for all general courses have been tabulated, whether those requirements were for general admission, or for a general degree, such as the

A.B., B.S., Lit.B., or Ph.B. Requirements for special courses, such as the courses for engineers, or for teachers, were not tabulated. Requirements for courses in commerce were found to correspond very nearly to requirements for the B.S. degree, but divergences were noted. For the sake of clearness and brevity, however, a single, general tendency with regard to each subject is all that is here presented. This may in every case be taken to represent the most liberal policy with regard to the subject in question. In one university, for instance, advanced Latin is required for admission to the course in Arts, but is alternative with a modern language plus solid Geometry and Trigometry for the course in Science and for the course in Business. In this case we have counted the university among the number which do not specifically require advanced Latin. For the points in which we are now interested are these: first, to what extent is the subject offered for admission to general courses; second, is there a tendency to require it for admission, either specifically or with an option? We are not for the moment interested so much in the possibilty of graduating our pupils into a particular college or into a particular course, as we are in the general effect of college entrance requirements upon the several subjects offered in secondary schools.

It should require but a glance at the figures in the accompanying tables to prove that the ideals for which we have been contending are not universally held by college authorities. The tendency, we are glad to note, seems to be away from hard and fast requirements towards options within a single field. This is a step towards the attainment of the ideal of general culture in secondary schools. But in so far as that ideal depends upon a *wide* offering of elementary subjects, the figures for Manual Training, for Music, for minor scientific subjects and for economic subjects may be instanced as dubious. And the mastery aspect of secondary education receives none too vigorous encouragement: witness, the figures for advanced Physics and for advanced History. The only form of mastery universally recognized is that of mastery (secondary school mastery) in the classics.

The tables presented on pages 37 to 39 show in compact form the present practices in admitting students to college.

TOTAL NUMBER OF COLLEGES—20

Subject	Number of Colleges in Which the Subject Was Specifically Required	Number of Colleges in Which the Subject Was on the Free Elective List	Number of Colleges not Offering any Examination in the Subject	Number of Colleges in Which the Subject Was One of a Group in Which an Option Was Offered. Remarks
ENGLISH	20	..	..	*Two* colleges require composition and offer Literature. One offers Advanced Literature
LANGUAGES *Ancient* Latin Elementary	8	4	..	*Eight* colleges offer an option in Languages, with a tendency to give Elementary Latin no more weight than Elementary French
Latin Advanced	6	5	..	*Nine* colleges make Advanced Latin optional. It is rated higher than Advanced Greek but no higher than Advanced German
Greek Elementary	3	6	..	*Eleven* colleges make Elementary Greek optional, usually with Latin, or with an equivalent combination chosen from Latin, French, and German
Greek Advanced	2	7	..	*Eleven*
Modern German Elementary	2	4	..	*Fourteen.* The option is usually wide, but is in at least three cases limited to choice between German and an ancient language
German Advanced	..	7	2	*Eleven*
French Elementary	2	4	..	*Fourteen*
French Advanced	..	7	2	*Eleven*
Spanish Elementary	..	3	16	*One*
Spanish Advanced	..	1	19	
NATURAL SCIENCE Physics Elementary	5	4	2	*Nine* colleges offer an option between Physics and Chemistry or between Physics or an equivalent amount from other scientific subjects
Physics Advanced	..	2	18	

TABLE—*Continued*

Subject	Number of Colleges in Which the Subject Was Specifically Required	Number of Colleges in Which the Subject Was on the Free Elective List	Number of Colleges not Offering any Examination in the Subject	Number of Colleges in Which the Subject Was One of a Group in Which an Option Was Offered Remarks
Chemistry Elementary	1	7	3	*Nine.* The tendency is to rank Physics and Chemistry as equivalent, and Botany, Zoology, Physiography, etc., as each worth half the value of Physics
Biology	..	3	12	*Five.* Some colleges offer Biology; some separate examinations in Botany and Zoology; some both
Botany	..	6	8	*Six*
Zoology	..	6	9	*Five*
Geology	..	2	17	*One*
Astronomy	..	4	15	*One*
Meteorology	..	1	19	
Physiography	..	7	7	*Six*
Physiology, Anatomy and Hygiene	..	3	13	*Four*
Psychology	..	1	19	
POLITICAL SCIENCE Civics	..	4	13	*Three.* Civil Government of the United States is often included with the requirements in U. S. History
Economics	..	3	16	*One.* Political Science is here made optional with History or Manual Training
MATHEMATICS Algebra Elementary	18	1	..	*One.* With other Mathematics
Algebra Advanced	1	4	8	*Seven.* With other Mathematics
Geometry Plane	18	1	..	*One.* With other Mathematics
Geometry Solid	9	6	..	*Five.* With other Mathematics
Trigonometry	1	6	6	*Seven.* With other Mathematics

TABLE—*Continued*

Subject	Number of Colleges in Which the Subject Was Specifically Required	Number of Colleges in Which the Subject Was on the Free Elective List	Number of Colleges not Offering any Examination in the Subject	Number of Colleges in Which the Subject was One of a Group in Which an Option Was Offered. Remarks
Analytical Geometry	..	..	19	*One.* Made part of a heavy substitute for Greek, elementary and advanced
History Elementary	16	4	..	Either Greek, Roman, English, American, Mediaeval and Modern European, or a combination
Advanced	..	9	10	*One.* Advanced History seems usually to mean merely *more* history
Manual Training	..	3	16	*One.* With History and Political Economy. Includes various specific subjects as wood-working and blacksmithing
Art Drawing	..	7	13	Freehand and Mechanical
Music Elementary	..	2	18	Harmony
Music Advanced	..	1	19	Counterpoint

EVILS OF THE PRESENT PRACTICE

Have we here found the reason for two real evils in our secondary education? Let us state them for your corroboration from your own experience, and with the statement leave our argument in your hands. We hold the college requirements responsible, namely, for the presence in Latin schools of pupils who never should be in them, who are not fitted for that special form of secondary training. And we hold the college requirements responsible also for the converse condition,—the social stigma (mild if you like, but real) upon the boys in the Manual Training and Commercial High Schools. The harm in one case is educational; in the other, social. But it is done, and will be done, until that happy time when no one who will and who can take it shall be prevented from proving his fitness for higher education.

III

VOCATIONAL STUDIES FOR COLLEGE ENTRANCE REQUIREMENTS

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TIMELINESS OF THIS DISCUSSION

The present is certainly a most opportune time for this discussion. A few years ago the general scheme of college entrance requirements seemed pretty well defined. Today we are awakening to our ignorance and are open to suggestions from all quarters. The growing recognition of music as a proper subject for entrance examinations is evidence in point. It may be that in this particular case the recognition was not wholly wise; that the cause of American music has far less to gain thereby than its friends have hoped; that preparatory music is likely to be to an even greater extent a fiasco than preparatory English has been. But it is enough for us to note that the recognition has been asked and given, and that collegiate authorities have in so far expressed their willingness to accept, for matriculation, subjects that are far removed from the lines of the traditional requirements. We may, therefore, attack the various questions connected with our subject without feeling that they have been answered for us in advance.

AN APPARENT INCONSISTENCY—ITS SOURCES

We note, at the outset, a certain apparent inconsistency in the demands of those who are urging the recognition of these new subjects. On the one hand, they are unreserved in declaring that the secondary school should not be degraded into a mere preparatory school; that it has a work of its own well worth doing for its own sake, without regard to the small percentage of students who afterwards go to college; that every stage of the educational process should be directed with a view to the present actual development of the pupil, and not with a constant squint at the supposed require-

ments of a future stage. Such phrases as "preparatory English" and "preparatory mathematics" are therefore resented. The work of the high school is felt to be no more preparatory to that of the college, than the work of the college is to that of the professional school. On the other hand, while thus asserting the independence of the secondary school, they are just as outspoken in the conviction that the colleges ought to accept the newer school-studies for a generous part of their entrance requirements—that is to say, that these studies also ought to be made "preparatory" subjects and thus be placed beneath the patronage and somewhat dictatory control of the collegiate authorities.

This apparent contradiction seems to have a twofold origin, partly in matter-of-fact and partly in educational theory. The fact of the matter is that the secondary school is in certain important respects essentially a preparatory school. The abrupt discontinuity of its work with that of the lower grades, and the intimate connection with that of the college freshman and sophomore years, are ample historical evidence of this. The high school has gotten its curriculum from above, not from below—and not only its curriculum but its ideals, its measures of value, its standards of accuracy and effectiveness. However small the proportion of boys who go to college, it is what is expected from these few that tends to set the mark for the rest; and wherever this work is departed from, it is almost invariably by a descent. Furthermore, the recent great improvement in secondary education throughout the country has been largely due to demands from above. The colleges were bravely struggling to rise, and because they could not rise alone they had to persuade the middle schools to follow them in the ascent.

I. HIGH SCHOOLS AS PREPARATORY SCHOOLS

For these reasons and in these respects, our high schools are essentially preparatory schools. To be sure, their growth would have been impossible without local support, and this support would not have been given if the people of the towns and villages had not felt the need of something more than an elementary education for their children. The extraordinary development of the high school system of California, with a minimum of state encouragement and without a particle of state financial aid, well illustrates this feeling.

In a village of fifteen hundred inhabitants, with, say, a thousand more within a circle of five miles radius, I have there seen a high school of one hundred twenty-five pupils—one in twenty of the total population; meaning that almost every boy and girl of proper age was in the school. It was not a rich community, and the high school tax was a fearful burden. The salaries of the four teachers ranged from one hundred twenty-five to seventy-five dollars per month. Surely that school was entitled to a large measure of self-respect and self-dependence. But an examination of its curriculum showed that it was entirely modeled upon the entrance requirements of the University of California; and the proud boast of the school was that it had been fully accredited by the university examiners. Situated as it was in the southernmost county of the state, this school had a course of study that was as nearly as possible like those of the San Francisco and Oakland high schools. No single study had any marked relation to the peculiar needs arising in such an environment. Thus, although the school was supported by an earnest public sentiment, its whole character was fixed, the direction of all its endeavors was determined, by extraneous influences. For very few of its graduates could ever hope to go to college.

The instance which I have cited is simply an extreme type, to which hundreds of others are no doubt closely parallel. It may serve to exemplify the fact that the American high school, as at present generally constituted, stands for nothing except an aspiration; that its curriculum is not an organic whole, but a conglomerate of what the colleges have found it possible or convenient to pass down to it; that it represents no actual social need; and that the public which supports it must, therefore, to a considerable extent, judge of its efficiency simply by its success in preparing students for college.

This is not the place to take account of the various more or less successful efforts which are being made to remedy this condition of affairs. Our present concern is with the facts as they are, and with the sort of public sentiment that they have occasioned. It is, I think, not difficult to see why collegiate recognition of a high school subject is felt to be so overwhelmingly important. It confers a badge of respectability, a title to public consideration and support.

EXCEPTIONAL POSITION OF THE VOCATIONAL STUDIES

It must, however, have occurred to the reader, that what we have been saying cannot pass without exceptions—notably music and the vocational studies. Of these it is conspicuously true, that they *do* stand in a very immediate relation to actual social needs, and that the public has a very swift and tolerably sure means of estimating the skill with which they are taught. Logically speaking, therefore, these studies have not the same need of collegiate recognition as most of the others. But sentiment does not always run in logical channels. When the sentiment has once been established, that the study which leads to college is more estimable than the one which does not, both teachers and students in the latter line must suffer from the general impression that the work they are doing is either nonessential or even of distinctly inferior grade. Needless to say, however, thoroughly good work in subjects which have an immediate and visible relation to social welfare cannot long remain without public recognition of their importance. In spite, therefore, of all possible prejudice against them, the vocational studies are not in any desperate need of the honor of being accepted for college entrance credits—though it is easy to see why the honor should be desired for them.

II. CLAIM OF THE HIGH SCHOOLS TO INDEPENDENCE

I undertook to give two reasons for the seemingly contradictory demands of the advocates of these vocational studies; on the one hand that secondary instruction be organized primarily for its own ends and not as a mere preparatory course; and on the other hand that the colleges accept the work thus organized as adequate preparation for their own work. A few of the facts bearing on the matter have now been briefly noted, and it remains to take account of the part which has been played by certain current educational theories. And here one is tempted to smile at the swift irony of fate, which has turned one of the firmest dogmas of recent conservatism into a war-cry of the new liberalism. A dozen years ago the conviction prevailed that the best preparatory course constituted at the same time the best possible secondary education for those who could go no farther; and school administrators were advised to use

this as a principle of economy—for which purpose, indeed, it was admirably suited. But today the maxim is simply converted, so as to read: The best secondary education, considered in itself, is likewise the best preparation for any further education that may chance to follow it.

From the point of view of formal logic, the meaning of the proposition is unchanged; but its implications are none the less radically transformed. For, in the first place, it is implied, that the practical experience of the school man is to be given precedence in its own domain, over the college man's theories as to what he has a right to expect from youth. This means the conferring of a dignity and responsibility upon the high school teacher that makes his office as worthy as any in the whole realm of education. And, in the second place, the converted proposition implies that the judgment of the experienced school man shall be accepted at its face value by the colleges, the only check put upon that judgment being the actual collegiate record of the students received from the schoolmaster's hands.

If the new maxim is still a lie, it is, at any rate, a truer lie than the old one. It ought to be true. Give the high schools freedom from politics and a relatively permanent and truly professional personnel, and there is no reason why it should not be true. From this point of view, the apparent contradiction which we have previously noted is easily explained. That the school men should demand at once independence and recognition is not intrinsically absurd.

VOCATIONAL STUDIES NOT EXCLUDED BY COLLEGE PREPARATION

But both the old maxim and the new are open to very obvious criticism upon other grounds. For secondary education, or even the best secondary education, is not an unambiguous term. The college has its own definite work to do, and that work presumably requires a certain amount of more or less definite preparation. On the one hand, the college is not the only institution for which the secondary school may prepare. It may prepare for the farm, the shop, the draughting-room, the office, or for various technical schools of higher grade; and the definite prerequisites for these various spheres of work are by no means identical. The assertion, then, that the best secondary education is at the same time the best

preparation for college, requires for its validity the proviso that the prerequisites for college work have not been slighted.

A candid examination of the premises, however, shows that this objection has not all the pertinence that might be supposed. Let us take the entrance requirements of the Literary Department of the University of Michigan as an example. The first feature that strikes our attention is the slenderness of these requirements. They amount to only fifteen units—that is to say, three recitations a day throughout the four years of the high school course; while good high schools commonly require four recitations a day, and, under conditions of overpressure, this number is frequently raised to five. The high school can thus easily accomplish far more than is required; and the superfluous energy may be devoted either to enabling their graduates to enter college with advance credit, or to giving them a more diversified secondary education. At the same time, the weaker schools find it a sufficient task to cover the allotted ground. After the meagerness of the requirements, we are, in the second place, struck by their indefiniteness. Only seven units (English, algebra and geometry, and physics) are definitely prescribed. Two years' study of a language (which must not be Greek) are also required. The remaining six units are freely elective from a considerable range of topics—history, ancient and modern languages, and various natural sciences. Thus the student may enter college without any history, or without a working knowledge of any language, or without any natural science other than physics. Furthermore, of the subjects actually prescribed, it is to be noted, that some forty per cent of the matriculants make no further use of more than a petty fraction of the mathematics they have acquired, that the same is true of physics, and that the preparatory English is so confessedly a failure that the one required course in the college is elementary rhetoric.

Like most unpolished facts these cut in various directions. On the one hand, they further minimize the necessity of giving entrance credits for work in vocational subjects. The well organized high school can easily, if its administrators so desire, devote four or five periods a week to such studies throughout the entire course, and still contrive to meet the college entrance requirements. Even a distinctly commercial or industrial school is likely to turn out men

who with a summer's coaching, can make up the necessary number of credits for matriculation. On the other hand, if the proposed innovation is thus seen not to be imperatively called for, the burden of proof is somewhat lightened for those who would prove it to be feasible. For all that they need to show is that the studies in question possess such culture value as to warrant their displacing other elective subjects (Greek, history, or biology, for example) in the early stages of a liberal education. Putting the two conclusions together, we may say that the proposed measure is not one of relief for the high schools, but of strictly collegiate policy, the sole question arising for discussion being whether it is in the interest of the college thus to encourage that sort of training in its matriculants.

Even this question is sufficiently complicated. We might be tempted to throw it aside with the remark, that no doubt different institutions, subject to different conditions, would probably have to settle it differently. That is no doubt true, as it is always true of questions of policy. There are, however, some general principles involved, which seem to me worthy of a brief consideration in this place.

RECOGNIZED VALUE OF THE VOCATIONAL STUDIES

The old antithesis of "liberal" and "vocational" is one that can no longer be maintained by students of education. It had its origin in a false—that is to say, impermanent—conception of the relation between work and leisure, which rested, in turn, upon an equally false conception of the essential distinctions between classes of men. It was Aristotle—the same observer who held that some men were born to be masters, and some to be slaves—that first gave clear expression to the sentiment, that, though leisure and business are both necessary, the former is altogether the more worthy both in itself and as an educational aim. Time, which is so much wiser than any single observer, has shown that the ennoblement of leisure is impossible without an equal ennoblement of business—that any attempt at the former apart from the latter is bound to issue either in a wretched dilettanteism or an almost equally contemptible "polite learning." The education that trains for work may be as truly liberal —i. e., tending to make a man free in body and soul—as an education which provides for the decent employment of leisure; and it can

descend to no depths of illiberality beyond those to which the latter has often sunk.

THEIR CHARACTERISTIC DEFECT

In discussing, therefore, the advisability of allowing matriculation credits for work in vocational studies, we may, I think, take it for granted that such studies are capable of affording a very high degree of culture. This need not blind us to the fact that they are liable to characteristic weaknesses. A useful end does not make a study illiberal, but a sentiment, that nothing is to be learned which does not have a direct bearing upon the end in view, most decidedly does; and such a sentiment is apt to be roused in young minds by an exclusive emphasis upon the specific practical applications of knowledge. Technology is every whit as worthy an object of study as science; but a course in any branch of technology, which does not presuppose a thorough grounding in the subsidiary pure sciences is likely to be a sorry sham. That is why, for example, textbooks in pedagogical psychology are so wretchedly poor, whenever they do not take for granted a previous schooling in general psychology. The same is true of the relation of instrumental drawing to geometry, and of agriculture to chemistry, botany, and entomology. If educational experience has proved anything, it has proved this,—that if science is to be studied to any real advantage, it must be studied first of all for its own sake—or *as if* for its own sake; that is to say, impartially, with breadth of view, and with an eye not simply to "practical" details but to the general principles which comprehend and explain the details. To attempt to plunder a science of just what is needed for a particular purpose, is to doom oneself to failure. Again, in the conduct of the technical instruction itself, it is important, both from the educational and the practical point of view, that the main emphasis be placed, not upon the convenient empirical formulae that can be applied without much critical thought, to the more common emergencies of every-day experience, but upon the reasons for the formulae. That is why in the training of teachers—to speak of the profession that is best known to most of us—the pedagogy of methods and devices has had to be supplemented, or even to be replaced, by the history and theory of education. That by following an opposite course, technical education

sacrifices its own highest ends is, I say, unquestionable; but it is its besetting sin. If, therefore, entrance credits were allowed in vocational subjects, the college might well observe with especial care the spirit in which the instruction was carried on—whether mere skill was aimed at or something more.

RELATION OF THE COLLEGE TO VOCATIONAL STUDY

There is this further consideration that may in many cases militate against the advisability of the proposed measure. The college itself gives no direct preparation for any vocation, except, somewhat anomalously, for that of the teacher and that of the consulting chemist. It does, however, aim at providing a general training in the sciences and humanities, such as will serve as a basis for the future acquirement of the arts both of business and of leisure. In other words, the college stands for a lengthened adolescence, the ultimate object of which is to ensure a more fully ripened manhood. As such, it presents a marked contrast to the various technical schools of the university, which introduce their students to vocational studies as promptly as possible after receiving them from the preparatory schools. Now the commercial and industrial high schools stand for an exactly opposite principle—the need of fitting vast numbers of boys and girls for the business of life, with all convenient speed. A lengthened youth is a luxury which all cannot afford; and even the technical school of college grade is beyond the reach of the great majority. These high schools have thus a work to do which yields to no other in social importance; but it is a work that is designed not as preparatory, but as supplementary, to the work of the college. The boy who enters a commercial high school, for example, does not do so with the intention of afterwards going to college; but he enters it just because he lacks either the means or the ambition of going to college, and wishes to be fitted for a position as promptly as possible. To be sure, he may afterwards change his mind, and determine to go to college at any cost. But in that case the few slight obstacles in his path will not seriously deter him.

It must not be forgotten, that the first two years of the college course are, as a usual thing, more closely connected with the classical, literary, or scientific course of the high school than with the last two years of the college course itself. This is tacitly recognized

in some colleges, by the very different requirements imposed upon students during the first two and during the last two years; it is openly proclaimed in others; and even where it is formally denied, the changing character of the instruction attests the fact. If we mean by a secondary education *such an introduction to the general elements of the various branches of modern culture as is necessary to prepare the student for intelligent specialization,* then our high schools and academies certainly do not cover the ground. That used to be the task of the college, but it now accomplishes something more than this. Before the student completes his undergraduate course, he is able, under proper guidance, to do a certain amount of really intensive work. But that is not during the first two years. These years really belong to secondary education; and if either the problem of the requirements for the bachelor's degree, or the problem of college entrance requirements is to be intelligently solved, they must be treated together, and treated with a full consciousness both of the twofold character of college work and of the relative continuity of the high school period and the freshman and sophomore years. Thus the proposal to accept work in vocational lines for college entrance is closely parallel to a proposition to permit college freshmen and sophomores to elect a certain amount of work in affiliated technical schools. This, too, is by no means an inherently ridiculous proposition, but it is worth noting that the drift of university sentiment is against it. Thus, for example, in the various "compound" courses that have recently been organized, entitling the graduate to two degrees—the literary-law, for instance—the technical work is not usually begun until after two years of strictly academic work. So, also, the departments of pedagogy do not usually receive pupils before the junior year. The same motives would presumably apply with even greater force to the requirements for the preparatory course.

RELATION OF THE PRESENT PROBLEM TO THAT OF THE BACCALAUREATE DEGREE

I said just above that the college entrance problem was really inseparable from that of the baccalaureate degree. With this principle in mind, let us refer once more to the University of Michigan entrance requirements. Attention has already been called to their very limited

significance, and the fact was used as an argument for the recognition of vocational subjects—if so little is essential, why not let these subjects, as well as any others, go to make up the meaningless total? It is quite possible, however, that some doubt may have been raised in the reader's mind, as to the wisdom of these requirements; and I dare say that if they represented a permanent condition of affairs very serious criticism would have to be passed upon them. But nothing is more obvious than that they represent a transition in the relations between school and college, a provisional compromise between various interests whose proper equilibrium has not yet been reached. For these entrance requirements must be understood in connection with the system of free election which has been established in the college; they had to be made as indefinite as possible in order that the student might be able to proceed in all possible directions thereafter.

It is noteworthy, that after the enthusiasm with which the elective system was adopted by the leading colleges of the country, a reaction has recently set in against it. It seems not likely that the system will be altogether abandoned anywhere, but modifications and limitations of a corrective character have in many quarters been adopted or at least prominently advocated. Thus the College of Arts and Sciences of Cornell University has recently adopted regulations which limit in various ways the student's choice of about one-third of the units required for graduation; the faculty, however, remaining "loyal to the principle of the election of studies." (President's Report, 1905–1906, p. 26.) It has been felt that the students need guidance—and, indeed, none have felt this more keenly than the students themselves. Ask any college senior, and he will tell you that the elective system is no doubt the best in itself, in that it offers the greatest opportunities of self-improvement to the student; but that the average freshman or sophomore does not know his own needs or intentions well enough to make a wise use of his opportunities.

To the student of education, certain observations upon this whole movement and counter-movement are now beginning to be fairly obvious. First, the colleges of the country are fairly committed to the free elective system; without it they cannot fulfill the functions which have grown upon them. Secondly, the limita-

tions upon free election which have been generally proposed are wholly inadequate to correct the undoubted weaknesses of the system. If the regulations are made rigid enough to ensure the interests of the majority, they at once become oppressive to an important minority. If they are so light as to encumber no one, then they serve to curtail only the grossest and most obvious abuses. Thirdly, the students entering college are not prepared to take proper advantage of the elective system. That requires, for one thing, an appreciation of the correlation of studies, such as the freshman can scarcely be expected to have. Fourthly—and this I conceive to be the heart of the whole matter—the adoption of the elective system by the colleges logically implies a far more extensive preparation than is now anywhere exacted, or than can be exacted from high schools with their present four years' course.

In a word, the college of the future must have behind it high schools offering a well-rounded and adequate secondary education. Such a course would itself provide for a considerable amount of election; but its requirements would assure an introduction to all the chief departments of intellectual culture—let us say, languages and literature; history and political economy; mathematics; physics, chemistry, biology, and geology; and psychology. In such a scheme, certain important vocational studies would assuredly hold an honored place; if not as a part of the requirements—for many students might profitably postpone that sort of work till a later period—then as urgently recommended electives. For it is not to be denied that these studies have a peculiar moral value, quite as estimable in its way as the scholar's devotion to pure science—a moral value which is shown in the habits of manly endeavor which they not uncommonly induce.

To a school offering a course of this character, the problem of college matriculation credits would be of very little concern. The colleges would accept its graduates as unquestioningly as they now receive students from each other or from reputable normal schools. And in its own community it would be a wonderful civilizing power. It would do for immense numbers what the college of a generation ago did for the comparatively few, and do it much better. That this is what the American high school is coming to, we can now scarcely doubt. The advanced credits which the better organized schools

are now able to secure for their graduates who enter college are but an indication of the drift of things. The lopping off of old and useless excrescences from the work of the elementary school would save at least a year, and very possibly two years, for the lengthened high school course; and the better articulation of the work of the lower and middle schools may mean almost as great a gain, if not in time, then in efficiency. The problem in this regard, as it today confronts us, is almost purely one of administrative detail.

Thus I feel sure that the advocates of the present measure are certain to gain their real end in the not distant future, not through the recognition of vocational studies by the colleges, but as they have gained similar ends in the past—through the development of the high schools themselves.

CONCLUSION

As matters stand, however, I do not see that this particular measure is to be very widely recommended. Some colleges, no doubt, will find it to their advantage to allow the desired entrance credits; but in general there appears to be very little occasion for the innovation, and very little good to be derived from it. Three classes of high school students would be affected. First, there would be those who elected these studies without intending to follow the vocations to which they led, but who hoped for an easier or more congenial method of getting into college. Such students might or might not be disappointed; but in either case they would almost certainly fail of the discipline of the vocational studies, in addition to losing that of the theoretical studies. At any rate, these young ladies and gentlemen could have no very large claims upon our consideration. Secondly, there would be those who intended eventually to make use of what they had learned, but to go to college first. In their case, the presumption would be that the vocational studies might better be postponed until a more adequate theoretical basis had been obtained. Exceptions would occur, but I doubt whether legislative provision ought to be made for these. Thirdly, there would be those who originally hoped for nothing better than to get a position when they graduated, but who later on found the means, or awoke to the ambition, of going to college.

Such students would, of course, be helped by the proposed measure; but as previously intimated, the obstacles which they have at present to overcome are not serious.

And when we deliberately face the question which was announced above—whether the vocational studies possess a culture value that warrants their displacing such subjects as history or biology in the earlier stages of a liberal education—we must, I think, answer it in the negative. If there were time for all things, we should not have to choose; but in so far as the time is limited we feel that the theoretical subjects should take precedence. To put the proposition in naked terms, that in education all the theoretical should precede all the practical, is to commit an evident absurdity and to invite obvious criticism. But it must not be forgotten, in the first place, that, so far as the moral discipline of contact with the fundamental economic problems of life is concerned, fate kindly provides that for a goodly number of our students—their life is not all one of pure theory; and, in the second place, that the entrance requirements as they stand are not so high as altogether to preclude a certain amount of voluntary vocational work in the high school. Taking all things into consideration, I for one feel driven to the conclusion, that for the high school boy or girl who is to go to college, it is more important to lay a broad foundation of theoretical knowledge that shall serve as a basis for his future general civic usefulness, than to devote himself at once to the direct preparation for a vocation. Great as is the value of the vocational subjects, I cannot regard it as equivalent—for such persons, at such a period—to that of the purely theoretical subjects. They will have time hereafter to learn to better advantage the practice of their vocation.

IV

VOCATIONAL STUDIES FOR COLLEGE ENTRANCE REQUIREMENTS

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DEFINITION OF TERMS

"Shall vocational studies be accepted for entrance to college?" Before entering upon a discussion of the question it seems necessary to define "College" as the educational institution which confers upon its graduates the first bachelor's degree—A.B., B.S., or Ph.B. By vocational studies we mean those studies, which, either by their very nature or because of the point of view from which they are taught, tend to prepare directly for specific efficiency in handicraft, business, or profession. For example, manual training and freehand and mechanical drawing for the trades; commercial geography, history of commerce, history of the United States with especial reference to industrial aspects, commercial law, banking, and finance, and industrial chemistry for the various commercial pursuits.

The question under discussion, then, is: Shall those studies which prepare directly for specific efficiency in handicrafts, commerce, and profession be accepted for entrance to those collegiate courses at the close of which the first academic degree is granted?

WHAT COLLEGE ENTRANCE REQUIREMENTS SIGNIFY

A study of the history of the enlargement of the college entrance requirements during the past two centuries fails to reveal the fact that subjects have in the past been placed on the list for college entrance because of their definite relation to the understood function of the college. New studies have frequently been tried in the secondary schools and because they have there proved their efficiency and because the schools have been insistent in their demands they have finally been accepted by the colleges. As early as the year 1800 our academies taught English grammar, geography,

algebra, geometry, natural philosophy, astronomy, music, composition, logic, but our colleges introduced these subjects at a later date. On the other hand, certain studies have been imposed by the colleges upon the schools as subjects proper for the preparation for college work. But there seems to have been no underlying principle which has determined the question of proper preparation for college.

Commissioner of Education Brown in "The Making of Our Middle Schools" says, "the idea of liberal culture was the dominant note of both academy and college education in the nineteenth century." This idea of liberal culture perhaps determined then more largely than any other educational procedure during the nineteenth century. The twentieth century will by no means give up this idea of liberal culture, but it bids fair to add the ideas of efficiency and service as influential factors in educational procedure.

If liberal culture, efficiency, and service are the educational ideas to guide us it behooves us to question seriously whether the college entrance requirements of today permit the secondary schools to train in the broadest way for culture, efficiency, and service. It has become more or less a custom for us to look to Harvard University for leadership in educational matters. The Harvard College entrance requirements today render it impossible for the graduates of our best manual training and commercial high schools to gain admission and yet who will claim that such graduates are less well trained than the graduates of our preparatory courses? It may be claimed that these graduates may enter the scientific schools, but this is not our contention. Is there any good reason why a graduate of one of our best secondary schools should be denied admission to the course leading to the bachelor's degree?

In other words, what do the college entrance requirements signify? What do our colleges want in the way of maturity, knowledge, and training in order that a young man may pursue college courses with profit? It seems to the writer that the college entrance requirements as stated in the announcements of our great educational institutions are but symbols of the training and maturity required for the pursuit of college courses. Harvard College practically requires a minimum of seven studies for entrance but permits no freshman to pursue seven studies at one time. Moreover not one of the subjects required for entrance, except English, is required

in any of the years of the college course. In other words the subjects required for entrance are not considered primarily as preparatory to the pursuit of the same studies in college. Hence we must conclude that the college demands of those desiring to enter its courses a certain modicum of knowledge of a number of subjects and more than this it demands a certain degree of maturity, a habit of work, and a facility in mental application.

Now, I presume, no one would claim that Harvard's list of options includes all those subjects the pursuit of which may give the maturity, the habit of work, and facility in mental application demanded. On the other hand, this list might reasonably be criticized as being somewhat one-sided. The schools are endeavoring to train in their students the power of self-expression and by no means limit the effort to training in verbal expression. Through the work in music power of tonal expression is developed; through freehand and mechanical drawing the power of graphic expression is developed; through the various lines of shop work the power of constructive expression is developed. In other words, our schools are trying to develop the complete power of self-expression.

ENTRANCE REQUIREMENTS AT PRESENT ARE ONE-SIDED

Few of our colleges require more than the power of verbal expression as measured by the requirements for admission, and in this respect the tests for admission are one-sided. Dean Woodward of Washington University says, "The requirements for entering upon college or university work should be general fitness and not familiarity with a particular subject; general strength to undertake new work in a new field." It is evident then that our list of subjects which may be presented for college entrance might be somewhat broadened.

But what does the college demand of a subject before it is accepted as an entrance requirement?

1. It shall possess sufficient content;
2. It shall be systematic;
3. It shall be well taught;
4. It shall be both informational and disciplinary.

The secondary school makes the same demands of all studies admitted to its program of studies but in addition demands that

subjects shall bear some relation to the environment of students and shall train for efficiency. Why is Greek practically relegated to the University as a subject of study? It certainly fulfils the fourfold requirement of the college—it has sufficient content, is systematic, is well taught, and is both informational and disciplinary, but it relates only slightly to environment and does but little in fitting its devotees for service and efficiency. Hence, it is gradually disappearing from the program of study of secondary schools.

The closer articulation of school and college seems to demand that the college shall enlarge its scheme of requirements so as to include those subjects which do train for efficiency and service. The most characteristic weakness in the subjects ordinarily required for entrance to college is the entire absence of application to things and affairs of daily life; e. g., our geometry and algebra as taught are pure abstractions and the student finishes these subjects with little or no appreciation of their practical applications. The vocational studies, on the other hand, are in their very nature practical and bear the most practical relations to the life about us.

PRESENT LIMITED RECOGNITION OF VOCATIONAL SUBJECTS

There is at present great diversity among our colleges in permitting certain vocational studies to be offered for entrance. Harvard College permits drawing and music; Leland Stanford, drawing, music, manual training; University of Missouri, drawing; Columbia, music, drawing, manual training. Unfortunately our women's colleges are least progressive in enlarging the scheme of entrance requirements. So far as the writer has been able to discover no woman's college accepts either domestic science or domestic art as an entrance subject. Our secondary schools throughout the country are in agreement in admitting manual training, drawing, music, and commercial branches to their program of study. Our secondary schools have proved beyond doubt the value of these vocational studies as elements in the training of boys and girls. Since our schools are in agreement as to the value of vocational studies and since some colleges already accept these studies for entrance it is only a question of time when any graduate of one of our best secondary schools will find it possible to enter any college of the land on the subjects he has studied in his secondary school.

It was in the days of Timothy Dwight, the elder, that natural science was looked upon as perhaps a valuable subject of study for some students but by no means necessary for the student preparing for college. But natural science was admitted to the program of study in secondary schools and having proved its value was eventually required for college entrance. The attitude toward the vocational studies is similar to that toward natural science in the days of Dwight. One by one subjects which have proved their efficiency have been accepted for admission by the colleges. Our colleges must eventually accept for admission any subject which has proved itself worthy as an element in training boys and girls of the secondary school. Judgment may differ as to what certain studies do accomplish; it may take years to secure agreement as to educational values, for there is no necessity for haste in educational procedure, but eventually our higher institutions will be compelled to accept those subjects which in the judgment of secondary-school teachers, school officials and parents have proved their efficiency in training for service and life in the community.

Believing that the testimony of men actively interested in schools giving training in vocational lines would be of value in this discussion a note of inquiry brought forth many interesting and valuable statements. In reply to the inquiry, "Do you consider the graduates of your school capable of pursuing with profit a college course leading to the bachelor's degree?" the following testimony was received from representative headmasters. Principal Frank Rollins, The Stuyvesant High School, New York City: "I am very glad to say that a considerable number of our boys are planning to take such courses and I am confident that they will do college work with profit." Mr. C. W. Permenter, headmaster of the Mechanic Arts High School, Boston, Mass.: "Many graduates of the Mechanic Arts High School make a creditable record in the Massachusetts Institute of Technology and the Lawrence Scientific School of Harvard University. There is no good reason for thinking that many of these men would not pursue successfully courses leading to the degree of A.B., if such courses were open to them." Mr. William L. Sayre, principal of the Central Manual Training High School in Philadelphia, says: "The graduates of this school are admitted on their diploma to the college departments of the Uni-

versity of Pennsylvania, Lehigh University, Lafayette College, and (with the exception of English) Cornell University. Their records in these institutions show that they stand shoulder to shoulder with graduates from other high schools and that in many cases take high honors. I have reason to believe therefore that our graduates could successfully take up college courses leading to a bachelor's degree." Such testimony at least shows that school men have confidence in the kind of training afforded by vocational studies as fitting for college entrance.

ENLARGED USEFULNESS OF THE COLLEGE AND HOW REALIZED

Colleges no longer exist primarily for the training of leaders. The increase in attendance at our degree-granting institutions has been enormous in the last quarter of a century. Our college clientele is no longer such a carefully selected lot of young men and women. The class of people who were a generation ago satisfied with secondary-school training for their children are today seeking collegiate training for their sons and daughters. The next twenty-five years will witness a continuance of this enlargement of attendance at our higher institutions, if our colleges meet the demands the public will surely make upon them; and the public will demand more and more a training suited to those who are not destined either by nature or environment for the traditional professions.

For too long a time our schools made provisions only for what psychologists describe as "men (boys or girls) of thought." Boys and girls of "feeling" and "action" have been the problems in the school. But today our schools are meeting the needs of all three types.

Our college entrance requirements, however, still test the boys and girls too largely on one side—thought. The future will demand more and more that college opportunities shall be open to the "feeling" and "action" type of boy and girl as well as to the "thought" type. And in order that such may be the case credit will be given by the college to the value of the so-called vocational studies pursued in the secondary schools. Our country seems destined to become a country of college-trained men and women.

If my statement that the college exists no longer simply for the training of a select few but rather for the upbuilding of the masses

of our population; if my statement that certain vocational studies —drawing, music, manual training, cooking, sewing, commercial geography, history of commerce, industrial chemistry, commercial law—have proved their efficiency in the training of boys and girls of secondary-school age; if my statement that the college must eventually accept for admission those subjects which have proved their worth in the secondary schools; if these three statements are correct, then what credit shall the college assign to each of these subjects in the general scheme of requirements? How shall the balance be struck between the vocational studies and the traditional subjects required by the colleges? On the Harvard basis of twenty-six points for entrance it would seem a fair thing to assign credits as follows:

Shop work (four years)	4 points
Freehand drawing	2 points
Industrial history of the United States	2 points
Commercial geography	2 points
Domestic science	2 points
Domestic art	2 points

The above list is simply suggestive as indicating the proper method of procedure in striking the balance between the traditional college entrance subjects and the vocational studies.

When our colleges accept for entrance subjects which have proved their worth in the secondary schools, then will our schools cease to be mere "fitting schools" and the best thought of school men will be given to a consideration of the training best suited to boys and girls of secondary-school age.

V

COLLEGE ENTRANCE CREDITS FOR VOCATIONAL SUBJECTS

W. J. S. BRYAN
Principal Central High School, St. Louis, Mo.

INTRODUCTION—THE SITUATION

The importance of thorough preparation of applicants for admission to college is not questioned by any observant teacher of a secondary school. Experience has taught that lack of preparation is not only discouraging to the ill-prepared student who attempts to do advanced work, but detrimental to others who are obliged to work with him; some of their time is spent unprofitably and his development is hindered if not wholly prevented. The success of class instruction depends upon proper grading. Not to recognize this fact, not to secure proper conditions in this respect, is to invite failure.

The growing insistance of schools of medicine and law upon adequate preparation of applicants shows plainly the present trend of educational thought in this direction. The demand for uniform college entrance requirements heard on all sides has arisen not from criticism of existing requirements, but from the desire to satisfactorily prepare applicants for admission to all colleges by a course of instruction acceptable to all rather than by many courses respectively satisfactory to each.

The diversity of requirements has resulted from local conditions and special emphasis laid by different colleges upon certain subjects or topics deemed of peculiar importance by these colleges, and it has been perpetuated by the isolation of the colleges from each other and from the great number of public high schools which have come into existence in the development of the public system and have framed their courses of study to meet the needs of the children of the public schools and to articulate closely with the work already done by them.

SECONDARY EDUCATION IN ITS RELATION TO ELEMENTARY AND HIGHER

There have been two points of departure in educational matters, the primary school and the college. The college demanded preparation for entrance and created the preparatory school. The stability of our form of government, the development of natural resources, and the growth of manufactures and commerce requiring directive intelligence necessitated the extension of the course of public instruction beyond the primary grades, and the high schools were multiplied.

The establishment of state universities at the end of the course of public education had as its logical presupposition the articulation of primary and higher institutions through the medium of the secondary schools. It is for the primary school to receive the children from the home and to train them to reasonable proficiency in elementary subjects. For this training eight years have been found requisite under ordinary conditions. The high school receives the children at this stage of their development and carries their education forward for a period of four years, disclosing to the responsive mind the various lines of human endeavor and achievement. It is for the college to further train such young men and women as have made good use of their twelve preparatory years and have shown by the work done that they can profitably undertake more advanced work. There should be no chasm between the college and the four-year high school with adequate equipment and thorough instruction.

DETERMINATION OF STANDARDS FOR ADMISSION TO COLLEGE

The state universities in the earlier days of their establishment because of the necessity of articulation with existing high schools of low standard have been obliged to modify their requirements of admission, but this condition is undesirable and calls for speedy amendment by increased efficiency of high schools. And such has been the history of the changing relation between high schools and state universities everywhere, a record of provisional articulation resulting from temporary adjustment of needs to attainment, with reasonable increase of demands from year to year on the part of the state university and steady increase of efficiency of high schools to meet these reasonable requirements.

Just what subjects should be required for entrance is an unsettled question and must remain so until education becomes a science and all phases and processes are completely understood. Some institutions still adhere very closely to original positions, others have modified their demands to suit changed conditions. The fact that is most potent for change is the increase in the number of those who desire to attend college without any intention of following a profession, who recognize the value of college training for leadership in any line of service, and have become convinced that higher education is profitable for both material and spiritual things, for both living and making a living. This deserved recognition and practical commendation of the work of the higher institutions is one of the most encouraging signs of the growth in intelligence of individuals and communities; but this increased attendance of men and women with widely diverging plans and conceptions will no doubt have a tendency to change ideas as to the course of study to be furnished before and after entrance, in preparation and in participation.

The evolution of a science of education will be conditioned by the determination of the effect upon the development of the mind of each study pursued or proposed. Too long teachers have worked in the dark as to the nature of the minds to be developed and as to their reaction upon the subjects of study. They have taught language, mathematics, history, science, rather than boys and girls, young men and young women, through these media.

Scientific pedagogy has for its condition precedent the scientific observation and recording of the mental phenomena resulting from the study of the various subjects of the curricula. Little has been done in this direction. Diligent search fails to discover such records of observations made by competent observers under suitable conditions. There are teachers of every subject taught who have a reasonably thorough and comprehensive knowledge of it and are successful in imparting instruction to those they strive to teach, but there are few consciously scientific teachers who are aware of the possibilities and are working steadily and confidently toward expected educational result.

In recent years educators have begun to recognize the importance of a study of childhood and youth, that the process of development and the natural sequence of the phases of growth may be noted

and may receive the consideration necessary to secure the best results in education. Next in order should come the careful investigation of the effects the study of each subject produces under given conditions upon the evolution of the individual. When this has been ascertained it will be possible to frame with assurance courses of study that will prepare for useful, satisfying lives.

The widening of the field of education through the enrichment of the courses pursued has resulted from changes in the needs and requirements of youth as individuals living in a growing civilization. Recognizing the changes in the environment of young men and women, educators have sought to prepare them to meet existing conditions and to improve the opportunities offered.

PRESENT STATUS OF VOCATIONAL STUDIES FOR COLLEGE-ENTRANCE CREDIT

Wisely conservative and unwilling to jeopardize the interests of those committed to them, teachers of youth have made innovations only when they were convinced of their pedagogic value. Thus the sciences forced their way into the curricula of the schools and higher institutions until they were given full recognition and approval. Thus also manual training has received recognition and the vocational subjects such as commercial arithmetic, bookkeeping, stenography, typewriting, commercial law, commercial geography, and commercial history are asking consideration.

An examination of the catalogues of twenty state universities of the central, northern, and western states and of an equal number of endowed colleges shows that of the entire list only five allow any credit for commercial arithmetic; five, for bookkeeping; two, for stenography; two, for typewriting; three, for commercial law; three for commercial geography; one, for history of commerce. Of the same list of higher institutions eleven mention manual training among the subjects that may be offered in satisfaction of entrance requirements.

Of the colleges and universities that offer higher commercial courses, as far as I have been able to ascertain, not one accepts any vocational subjects for entrance or recognizes these subjects in its admission requirements.

If these subjects are to be recognized as affording training for

subsequent work in higher institutions, evidently it will have to be demonstrated that they are equivalent in disciplinary power to some of the subjects already included in the list of those that may be offered in satisfaction of entrance requirements. They will have to do what the sciences have done, namely, prove their fitness as preparatory subjects for the development of intellectual power to profitably pursue advanced work in college and university.

WHAT CREDIT-VALUE SHOULD BE ASSIGNED VOCATIONAL SUBJECTS?

On the supposition that vocational subjects have educational values, what would be a reasonably proportionate allowance in a scheme of entrance requirements in view of the values assigned to the several subjects now included in the list of those accepted by the various universities and colleges? Taking the universities of Harvard, Dartmouth, Chicago, Michigan, Illinois, and Ohio as typical and averaging the percentage of entrance requirements that may and must be furnished by various lines of study, I find that

English may furnish 20%, must furnish 20%
History may furnish 20%, must furnish ——
Mathematics may furnish 25%, must furnish 20%
Languages may furnish 40%, must furnish 15%
Science may furnish 30%, must furnish ——

There is practical uniformity in the valuation of English and mathematics. History varies from 0% to 13% as a required subject and from 14% to 27% as an elective subject. Science varies from 0% to 13% as a required subject and from 10% to 50% as an elective. Foreign languages vary from 0% to 20% as required subjects and from 27% to 53% as electives.

The number of periods spent on vocational subjects, estimating the periods given to bookkeeping and typewriting as laboratory periods would suggest ½ or 1 credit for bookkeeping, 1 credit for stenography and typewriting, ½ credit for commercial law, ½ credit for commercial geography, ½ credit for history of commerce, in all 3 or 3½ credits, if one credit represents 180–200 periods of work requiring preparation.

If the high schools of St. Louis may be taken as a norm, the vocational subjects occupy 1500 periods out of 4400 periods or 1140

periods out of 4040 periods. The four-year commercial course consists of

800 periods of English,
300 periods of history,
600 periods of science,
400 periods of mathematics,
400 periods of foreign language,
400 additional periods of a foreign language or of drawing,
100 periods of civil government,
100 periods of economics,
120 periods of penmanship,
80 periods of business arithmetic,
300 periods of bookkeeping,
300 periods of stenography,
300 periods of typewriting,
100 periods of commercial law,
100 periods of commercial geography,

in all 4400 periods of work, of which 1500 periods are given to vocational subjects, or 1140 periods out of 4040 periods, if bookkeeping, penmanship, and typewriting are estimated as subjects that do not require preparation.

The work in the commercial course not vocational would entitle the graduate to

4 credits for English,
2 credits for language,
2 additional credits for language or
1 credit for drawing,
2 credits for mathematics,
1 credit for history,
3 credits for science,

nearly enough credits for admission to most colleges.

The vocational subjects take the time which in the college scientific course is given to other subjects, namely science, 200 periods; mathematics, 480 periods; language, 600 periods; history, 100 periods; for which six credits ordinarily would be allowed.

Work in civics and economics is frequently accorded ½ credit

for each subject. The work in commercial geography and history of commerce would seem very similar to work done in history in which the commercial development of various countries receives considerable attention. The work in penmanship presumably no one would expect to be given credit and that in commercial arithmetic would hardly be considered apart from bookkeeping in which it finds its application.

It remains to consider the claims of bookkeeping, stenography, and typewriting.

Bookkeeping is essential to business transactions of which it is the record, but it does not require or develop a high order of power. Its principles are few and once mastered are not difficult of application. The system and accuracy demanded are valuable acquisitions and the classification of each transaction trains the power of judgment within certain narrow limits. It is doubtful, however, whether the time spent upon it could not be better employed were it not for its practical value. If the salaries paid for such services are an index of the estimation of the business world of the grade of ability requisite, its rank is not high.

Stenography as a system of symbols for the rapid recording of speech and thought has extensive practical use. Moreover, its demands upon the intelligence of the user cultivate alertness and quickness of apprehension and call into exercise power of concentration and attention; while, the transcription of stenographic notes exercises the memory and trains in comprehension and expression of thought. Nevertheless, were it not for the facility its mastery affords, I should question the wisdom of devoting to its study the time required for its acquisition.

Apart from stenography, typewriting would be only a form of manual dexterity. Memory is exercised and practice in forms of expression is acquired. Spelling, capitalization, punctuation, paragraphing, are impressed, and neatness, accuracy, and quickness are taught by constant repetition but the time spent in learning typewriting would not be well spent, if it were not for the facility it affords.

REPORT OF THE SECRETARY

I. Minutes of Meetings Held at Louisville, Ky., Feb. 26, and 28, 1906

Monday, Feb. 26.—An open meeting had been arranged for to be held in the Warren Memorial Church. Here over six hundred people gathered and listened from eight o'clock until ten to the discussion of George P. Brown's *Yearbook* on the study of English. The following members gave short, pointed, stimulating discussions. All excepting Mr. Brown, the author, were limited to ten minutes each, and occupied the full time:

George P. Brown, Bloomington, Ill.

Pres. L. H. Jones, Michigan State Normal College, Ypsilanti.

Prof. George M. Forbes, Rochester University, Rochester, N. Y.

Prof. W. S. Sutton, University of Texas, Austin.

Supt. Stratton D. Brooks, Boston, Mass.

Prof. Samuel T. Dutton, Columbia University.

Pres. Charles McKenny, State Normal School, Milwaukee, Wis.

Prof. Reuben Post Halleck, Boys' High School, Louisville, Ky.

Miss Ada Van Stone Harris, Supervisor Kindergarten and Primary Education, Rochester, N. Y.

J. Stanley Brown, Township High School, Joliet, Ill.

F. Louis Soldan, Superintendent of Instruction, St. Louis.

Each speaker discussed a specific, limited phase of the subject.

This meeting was considered one of the best the Society ever held. It certainly was a notable meeting in that the large audience gave uninterrupted attention until ten o'clock, at which hour President Dexter ended the discussion by declaring an adjournment.

Although this meeting was a great popular success, and like all such meetings, was highly gratifying to writers and speakers, yet it is doubtful if a strictly scientific body can fittingly lend itself to popular demonstrations. Such a meeting always takes the time and absorbs the opportunity for a meeting at which members should get down to close and severe study and exchange of views on the problem before the Society.

Wednesday, Feb. 28.—At four o'clock P. M., about forty active members gathered in the parlors of the First Christian Church, Pres. Edwin G. Dexter presiding.

Minutes of Asbury Park meetings were approved as written in the *Yearbook.*

Moved, That the Secretary get a stenographic report of discussions at meetings of the Society and print the same in the minutes.

Two main objections were urged against this motion: first, it would involve too great an expense for printing; and second, such reports might often be of questionable value.

After two amendments the motion was passed as follows: That members of the Society submit to the Secretary abstracts of their discussions for printing in the *Yearbook* when requested by the Executive Committee.

President Dexter ruled that discussion of Mr. Brown's monograph, "The Teaching of English in Elementary and High Schools" be taken up first, and that at five o'clock he should call for business, unless the Society instructed otherwise.

Discussion was continuous for one hour, yet very few of the main propositions or problems of Mr. Brown's study were touched upon. This suggests the value of planning for a consideration of the main points in a paper, and allotting to each point its proportional part of the available time.

The following members took leading parts in the discussion: Homer P. Lewis, Stratton D. Brooks, Charles A. McMurry, W. J. McConathy, Thomas H. Briggs, Jr., John W. Cook, Ossian H. Lang, L. H. Jones, Francis G. Blair, and others.

Hereafter when recording the names of new members the items of biographical information called for in the application blanks will be given for more complete identification. The following persons were elected to Active Membership at Louisville:

Thomas H. Briggs, Jr., A.B., Wake Forest (N. C.) College, and the University of Chicago; instructor in English, Eastern Illinois State Normal School, Charleston, Ill.

Elizabeth H. Bunnell, A.B., Mount Holyoke Seminary, A.M., Columbia University; teacher of English, Training School for Teachers, Brooklyn, N. Y.

Ira I. Cammack, B.S., Earlham College; principal of Central High School, Kansas City, Mo.

John W. Carr, A.B. and A.M., Indiana University; superintendent of instruction, Dayton, Ohio.

Albert S. Cook, A.B., Princeton University; superintendent of schools, Baltimore County, Md.

Emma C. Davis, supervisor of primary education, Cleveland, O.

Mary E. Doyle, superintendent of training, State Normal School, Superior, Wis.

Lida B. Earhart, student in Columbia University; formerly training teacher in State Normal School, Whitewater, Wis.

A. C. Fleshman, M.S. and A.M.; professor of pedagogy and training, State Normal School, Slippery Rock, Pa.

J. Montgomery Gambrill, Baltimore Po'ytechnic Institute, assistant state superintendent of education, Baltimore, Md.

Herman C. Henderson, A.M., University of New Brunswick, and University of Chicago; professor of pedagogy, State Normal School, Milwaukee, Wis.

Patty S. Hill, head of Louisville Kindergarten Training School, Louisville, Ky.

H. H. Holmes, B.S., instructor in mathematics, Central High School, Kansas City, Mo.

Horace H. Hollister, A.B. and A.M., Iowa State University; high school visitor, University of Illinois, Urbana, Ill.

Benj. J. James, A.M., Northwestern University, Chicago University; superintendent of schools, Waukesha, Wis.

Charles H. Judd, A.B., Wesleyan University, Ph.D., University of Leipzig; assistant professor of psychology, and director of summer school, Yale University, New Haven, Conn.

W. H. Kirk, A.M., Baldwin University; superintendent of schools, East Cleveland, O.

Maria Kraus-Boelté, academic training in Germany and England; principal Kraus' Seminary for Kindergartners, Hotel San Reno, Central Park, New York, N. Y.

W. J. McConathy, principal Normal School, Louisville, Ky.

C. M. McDaniel, B.S. and A.M., Wabash College; superintendent of schools, Hammond, Ind., and principal Winona Lake Summer School.

Irving I. Miller, Ph.D., Rochester University and University of Chicago; professor of psychology, State Normal School, Milwaukee, Wis.

Bertha Payne, head kindergarten teacher, School of Education Chicago, Ill.

The nominating committee, consisting of J. H. Van Sickle, E. F. Buchner, F. E. Bolton, Charles McKenny, and J. Stanley Brown, reported the following nominations:

For President—Reuben Post Halleck, Louisville, Ky.

For Secretary-Treasurer—Manfred J. Holmes, Normal, Ill.

For Members of Executive Committee—W. S. Sutton, of the University of Texas, and Stratton D. Brooks, Boston, Mass.

The report was adopted and the nominees declared elected.

President Dexter read a communication from the President of the American Association for the Advancement of Science inviting the National Society for the Scientific Study of Education to affiliate with that organization. President Dexter then explained the probable advantages of becoming associated with such a scientific society, and how it would affect the constitution of the National Society. After considerable discussion the invitation was declined, and the President instructed to make appropriate response to the invitation.

The following report of the Committee on renaming the National Society for the Scientific Study of Education was next received.

To the National Society for the Scientific Study of Education:

Your committee appointed to make recommendations concerning the renaming of this Society, submitted a report at the Asbury Park meeting recommending the adoption of the name, "The National Society of Education." Because the question of affiliation with the American Association for the Advancement of Science was under consideration, it was deemed wise to defer final action and the question of renaming was referred back to the committee for further consideration to report at the February meeting, 1906.

Your committee wishing to secure a fuller expression of preferences than was possible at the time of making its first report, sent out additional inquiries to members with the following results:

Out of a total of thirty-three preferences, fifteen were in favor of the name "The National Society of Education," six favored the "American Education Society," and thirteen were scattering.

Your committee still holds that because of brevity and the retention of the larger part of the present name of the Society that the name "The National Society of Education" should be adopted. Inasmuch as the preferences of members, as far as expressed, were largely in favor of the name, your committee recommends that this Society be renamed "The National Society of Education."

Respectfully submitted,

H. E. KRATZ
F. G. BLAIR
W. S. SUTTON
Committee on Renaming

It was moved and seconded to adopt the report of the committee on renaming. After some discussion, the motion was voted on and lost.

Motion was then made and seconded to adopt the name "The Herbart Society." This motion was amended giving the Executive Committee discretionary power as to the use of the word "National" or "American" preceding the word "Herbart." The motion as amended was passed by a large majority.

This motion to adopt the name "The Herbart Society" was not offered as an amendment to the constitution, it was not so interpreted by the presiding officer, no announcement was made (in fact no note was taken) as to whether the majority was the two-thirds majority required to amend the constitution; therefore, since a change of name involves a change in the constitution, the Executive Committee did not feel authorized nor warranted in introducing any change of name until the action of the Society should meet the requirements of the constitution.

Dr. C. A. McMurry suggested a valuable line of work the Society might encourage, namely, the formation of local clubs for the study and discussion of the *Yearbooks*.

II. Status and Prospectus of the National Society

1. *Historical note.*—The National Society for the Scientific Study of Education is the lineal successor to the National Herbart Society which was organized at the Denver meeting of the National Educational Association in 1895. The National Herbart Society was born on the one hand of the serious need of advancing the status of scientific method in education in our country, and on the other hand of the progressive energy of a small group of the younger American educators. It was one of several characteristic movements in the history of education in the United States during the last decade of the nineteenth century. This decade marks a veritable renaissance in American education, and it would be a biased or superficial historian who should say that all the various phases of this renaissance were not essentially indigenous to America. The high-school movement was a vigorous and prolific outburst rather than a gradual growth because the need of secondary education for all the people had grown much more rapidly than provision for or even recog-

nition of such need. The reselecting and reorganizing the elementary course of study to more faithfully and adequately meet the requirements of modern life and the needs of the children was another conspicuous phase of this awakening. As a logical result of these two movements came the demand for better instruction and the more adequate provision for the education and training of teachers. It was in this decade that the child-study movement had its overflow, and when seen in the light of its true causal relations must be recognized as a highly important phase of this educational renaissance. The great improvement in methods and effectiveness of the work of the National Educational Association was a response to the educational situation. Some of the most progressive and aggressive young men of the country determined to equip themselves to meet the educational situation with the highest possible degree of effectiveness. Happily they truly discerned that the vital core, the very heart, of the educative process is the unitary action of learning and teaching; and that the art of teaching rests upon principles or laws that inhere in the nature of the learner and the subject-matter. They therefore concentrated their study upon the conditions and mental processes involved in learning, and upon the selection and organization of the content of the course of study. Some of these men went to Germany to get what help they could, while some stayed at home. Those who went abroad seem to have been deeply impressed and inspired by the educational doctrines of Johann Friedrick Herbart, who in a very true sense was the father of the scientific study of education. On returning to America these men applied themselves with serious devotion and great vigor to improvement in our courses of study and methods of teaching. They inaugurated a propaganda of educational ideas that for serious enthusiasm and popular contagion can hardly be paralleled. The chief studies, discussions, and writings focussed upon such central, organizing topics as "the doctrine of interest;" "the law of apperception;" "the selection and correlation (or concentration) of subject-matter of the course of study"—"the culture epoch theory" being a chief theme here;" "the formal steps of instruction;" "the ethical aim of education," etc. Now because these topics were also the central and fundamental ones in Herbart's pedagogy, the men who propagated the ideas in America under the Herbartian terminology, came to be

called Herbartians. They did not object to the distinction thus given, and when they finally organized themselves for greater effectiveness it was natural, logical, and appropriate for them to adopt the name they did. The first name was "The Herbart Society for the Scientific Study of Teaching."[1] The second form of the name was "The National Herbart Society for the Scientific Study of Education."[2] This second form of the name continued until 1899. For convenience the explanatory part of the name was omitted in everyday use.

The leaders of this national movement for a serious, intense, and scientific study of vital and pressing educational problems are well represented by the first "executive council," which continued in office from 1895 to 1899. They were Charles De Garmo, president, Nicholas Murray Butler, John Dewey, Wilbur S. Jackman, Elmer E. Brown, Frank M. McMurry, Levi Seeley, C. C. Van Liew, and Charles A McMurry, secretary. It must not be inferred that all the names in this now noted list of American educators belonged to the "Herbartian" category. Both the personnel and the clientele of the Society from its inception show that the movement was broader than what is denoted by the term "Herbartian;" but the Society as a whole was for some years characterized and dominated by the stirring enthusiasm and aggressive leadership of those who were closely identified with the "Herbartian" topics. The first three *Yearbooks* show that the studies and discussions were almost entirely on the so-called "Herbartian" topics. The *Fourth Yearbook* shows a breaking up and a broadening out; while the *Fifth Yearbook* and its Supplement show that the thought has returned to the educational situation in its wider extent and its newer meaning. Then follows a year (1900) for which there is no record of any activity of the Society. No meetings were held and no *Yearbook* issued.

In February, 1901, the National Herbart Society for the Scientific Study of Education was reorganized with somewhat extended plan and purpose. The name remained the same excepting that the word "Herbart" was omitted and the explanatory part was included in the everyday use of the name.

2. *Purpose and method of the National Society.*—During its first stage the National Society "was organized for the aggressive dis-

[1] Preface to *First Yearbook*. [2] *First Yearbook*, p. 204.

cussion and spread of educational doctrines," and it desired "to draw into its membership all teachers, students of education, and parents who wish[ed] to keep abreast of the best thought and discussion." The purpose, further, was "to give to the doctrines of Herbart, as of other educators, a thorough study and criticism;" and "to test all theories by the standard of practical usefulness." Some weeks before the N. E. A. meetings it published a *Yearbook* that contained one or more monographs on important educational topics carefully worked out by specialists in the field discussed. It was supposed that members would study the *Yearbook* before the meetings, thus preparing for able and profitable discussion. These books were also widely disseminated through the trade channels. The chief characteristic purposes of the Society in its first stage, therefore, were the writing of monographs on important educational topics, and the discussion of these monographs by members of the Society at their regular general meetings and by members organized as local round tables.

During its second stage the original purposes of the Society have been continued, but there are some distinctive characteristics added; e. g., the topics cover a greater scope of vital educational principles and problems; each active member of the Society is supposed to be seriously and patiently at work upon the study of some problem arising out of his immediate work, and that he is seeking the solution of his problem by a scientific method of procedure; thus the Society endeavors to help elevate the scientific character of both the personnel and the work of the teaching profession; it calls for expert inductive studies of prevailing conditions as a guide to intelligent treatment and improvement of these conditions; from time to time it calls for reports from active members indicating the specific problem under study, the method of proceeding in the study, and the results obtained; it is planning to issue a series of monographs collating and organizing the fundamental data—the conditions, processes, laws, and guiding principles—underlying the science and art of education; it seeks to cultivate a spirit of professional co-operation and reduce to a minimum the spirit of commercial competition. Its organ for all these purposes is the *Yearbook*, supplemented by circular letters and other communications, and close and careful discussion at the meetings. Some of these

projects are still on probation, and it is yet to be seen whether a society with such standards and purposes can be maintained by the teaching profession. I have not the slightest doubt that such a society can be maintained. There is great need for it, and there is a sufficient body of men and women who earnestly desire such an organization; what is needed is an organizing genius who can take hold of the situation and bring about the results desired.

III. Announcements to Active Members

The Chicago meetings, Feb. 25–28, 1907.—Owing to the postponement of the San Francisco meetings, two topics will come before the Society at Chicago.

First, Prof. Ellwood P. Cubberley's monograph on "The Certification of Teachers" will be the basis for discussion for Monday evening, Feb. 25. This meeting will be held in the Auditorium Hotel, beginning at 7:30 P. M. Look for placard notice.

On Wednesday, P. M., 4:00 o'clock, the report of the committee on college entrance credit for vocational courses will be the basis of discussion. The place for this meeting will be announced by placard in the hotel lobby.

Supplementary meetings may be held if the Society so decides.

At the Wednesday session the regular annual business meeting will be held. The items of business so far as known at this writing are—

Election of officers.

A consideration of the policy and method of the Society. Should we issue more than one leading study a year? To what extent should the *Yearbook* contain reports from active members? Shall the *Yearbook* be an open forum for the thoughtful and dignified presentation of differences of opinion on questions that come before the Society? Shall there be established a new standard for Active membership? The right sort of standard could be made suggestive and stimulating to the younger members of the profession. This Society ought to be of such high character that membership in it will be a truly worthy goal for the more professionally ambitious of the young men and women who enter the field of education. Should not the standard for election to Active membership soon be something like this?—No person to be eligible until he or she has

undertaken the study or investigation of some educational problem (either theoretical or practical) and brought it to some more or less definite conclusion. The evidence of such serious professional and scientific spirit could be considered a qualification for Active membership.

Ought not the secretaryship and the editorship to be divided between two persons?

Shall the National Society print in its *Yearbook* the reports of committees of other societies especially when those reports are, or are to be, printed elsewhere? Shall the committee plan of study and investigation be carried on?

To the above, other items of business that members may suggest will be added.

IV. Financial Statement

M. J. Holmes, Secretary-Treasurer, in account with The National Society for the Scientific Study of Education for the year ending Dec. 31, 1906:

Debits—			
To cash balance per statement Dec. 31, 1905		$153.96	
To membership fees and dues for 1906		430.00	
To sales of Yearbooks prior to July, 1906		22.61	
			$606.57
Credits—			
By printing and stationery		$204.65	
By office help and supplies		98.25	
By postage and express		43.26	
By traveling expenses		35.10	
By telephone and telegraph messages		2.80	
			$384.06
Balance due the National Society			$222.51

The University of Chicago Press in account with the National Society for the Scientific Study of Education (items shown by memorandum bills and statements):

Debits—			
Jan. 1 to Mar. 31, 1906	$ .75		
April 1 to July 31, 1906	3.05		
August 1 to Dec. 31, 1906	330.21		
		$334.01	
Credits—			
Balance due the National Society per statement Dec. 31, 1905	$ 37.25		
Jan. 1 to Mar. 31, 1906	84.34		
April 1 to July 31, 1906	77.88		
Aug. 1 to Dec. 31, 1906	204.93		
		$404.40	$70.39
Balance standing to credit of the Society Dec. 31, 1906			$292.90

ACTIVE MEMBERS OF THE NATIONAL SOCIETY FOR THE SCIENTIFIC STUDY OF EDUCATION

Zonia Baber, School of Education, Chicago, Ill.
Frank P. Bachman, Normal College, Ohio University, Athens, Ohio.
William C. Bagley, State Normal College, Dillon, Mont.
C. M. Bardwell, Superintendent of Schools, Aurora, Ill.
R. H. Beggs, Principal Whittier School, Denver, Colo.
Ezra W. Benedict, Principal of High School, Warrensburg, N. Y.
Francis G. Blair, Superintendent of Public Instruction, Springfield, Ill.
Frederick E. Bolton, State University of Iowa, Iowa City, Iowa.
Richard G. Boone, Editor of "Education," 80 Bruce Ave., Yonkers, N. Y.
Eugene C. Branson, President State Normal School, Athens, Ga.
Thomas H. Briggs, Jr., State Normal School, Charleston, Ill.
Sarah C. Brooks, Principal Teachers Training School, Baltimore, Md.
Stratton D. Brooks, Superintendent of Schools, Boston, Mass.
George P. Brown, Editor "School and Home Education," Bloomington, Ill.
John F. Brown, University of Wyoming, Lamarie, Wyo.
J. Stanley Brown, Superintendent Township High School, Joliet, Ill.
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THE SIXTH YEARBOOK

NATIONAL SOCIETY FOR THE SCIENTIFIC STUDY OF EDUCATION

PART II

THE KINDERGARTEN AND ITS RELATION TO ELEMENTARY EDUCATION

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THE SUBJECT OF THIS YEARBOOK WILL BE DISCUSSED AT THE LOS ANGELES MEETINGS OF THE NATIONAL SOCIETY, MONDAY, JULY 8, AND WEDNESDAY, JULY 10, 1907

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PREFACE

One most striking phase of current educational history in the United States is the status of both theory and practice of kindergarten education and its relation to elementary-school education. It is universally accepted that the law of unity and continuity applies to the development of human beings as truly as to any other forms of life; but educational practice is slow to adjust itself to educational theories even after such theories have become permanently established by scientific investigation and criticism. A bald proof of the truth of this statement is found in the relation of kindergarten education to the first years of school education. The problems and conditions involved in this relation have been carefully studied, and the results are here offered as a contribution to the solution of one of the most urgent problems in American education today.

This *Yearbook* is published with the hope that it will stir kindergartners, primary teachers, and supervisors to renewed thought and study; that thus they will more clearly define their common problems, develop more mutual sympathy and appreciation, and become better able to co-operate intelligently and effectively in their great work.

The writers of this *Yearbook* are peculiarly and eminently well fitted to speak on their respective phases of the problem under consideration.

Miss Harris, to whom are due the origin and execution of the plan, has a national reputation in this field of education. She has conceived and carried out the plan under the advantage of a broad and accurate knowledge of needs, conditions, and persons.

Professor Kirkpatrick stands close to the head of the list of careful and trustworthy students of childhood and the whole field of education.

The paper by Mrs. Maria Kraus-Boelté is of much historical value, coming as it does from one who has been working for upwards of a quarter-century for the spread of the kindergarten in the simplicity and earnestness which characterized Froebel's own demonstrations of his idea. A link is found here which unites the kindergarten of today in this country with that of Froebel more

than fifty years ago in Germany. The welcome which the kindergarten received in the United States among people interested in education and social progress is largely due to its introduction by persons of such culture and sympathetic insight as are possessed by Mrs. Kraus-Boelté.

This paper reflects the educational teachings of Froebel as he enunciated them, without the accretions or the modifications of recent years. For this reason, one finds here a sympathetic and intuitive presentation of the claims of childhood; and of the means prepared by the founder of the kindergarten for encouraging creation and discovery, with such directions for their use as Froebel deemed essential to promote "willing obedience," order, and freedom in the life of children.

Miss Hill, Miss Mills, and Miss Vandewalker, together with a few others, stand for the newer developments of the kindergarten and its organic connection with the primary school. They believe in a *progressive* ideal of life and education, and, therefore in a progressive adaptation of institutions to the needs of life as new wants appear or as old wants call for satisfaction in a higher degree.

The present *Yearbook* does not complete the study. It will be supplemented by a careful, detailed study of conditions, possibilities of improvement, and ways of bringing about such improvement, so that both kindergarten and primary school may more nearly make their maximum contribution to the education of children.

M. J. HOLMES

THE SIXTH YEARBOOK

I

INTRODUCTION

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The aim in the preparation of this Yearbook has been to bring before this Society, for careful consideration, the purpose, value, and scope of kindergarten education as the basis of our educational structure. It is viewed from the standpoint of the psychologist, from that of the student and teacher who first received the kindergarten message from Keilhau under the instruction of Frau Froebel, and from that of kindergartners whose view-point has been modified because of training, conditions, and environment; also from the point of view of one who has watched and worked with the child beyond his kindergarten period, and thus can value its influence upon the future stage of educational work.

BASIC PRINCIPLES AND EDUCATIONAL VALUE OF THE KINDERGARTEN

The principles which underlie the kindergarten work are universal, fundamental, and absolutely a part of all that is good in educational processes from the beginning. That the vital principles of education should prevail in both the kindergartens and the schools, and that the application of these principles to the great institutions of learning, so that it shall be an unbroken circle, and that the development of our children may be harmonious and continuous, and the chain of impressions perfect and unbroken, is the essential problem in education.

More than any other educational movement of the century, perhaps, the kindergarten, derives its validity from its recognition of a basic philosophy. It exists that the child, every child, may have life and have it more abundantly; that the community may be elevated, the race improved.

Dr. Hailman ably defended the kindergarten when he said:

It is not a mere ingenious contrivance, invented for the purpose of amusing little children instructively, and of relieving the indolent or overburdened mothers of troubles and embryo sufferings, but a plan of education that has its roots far down in child-nature, and that shelters beneath its branches strong, ripe men and women. It is not a mere cunning invention between the nursery and the school, intended to train up the raw material for the wisdom factories; but a full scheme of education that is to lead the human being from birth to maturity in the road of a wise and useful activity to the goal of true happiness. It recognizes that every child has a threefold nature. He is body, mind, and soul.

The child's early life is in a small circle. With new observations and new experiences the circle of his life steadily widens.

For a few months the child hardly leaves the arms of the mother; then he seeks his companions in his brothers and sisters, or in the objects and animals about the home. Later the neighborhood furnishes a broader field; he is eager to go to school for the broader life he finds there; the kindergarten, the school, the college, all come in their turn to minister to his broadening life. The thoughtful teacher of little children today recognizes that every child has in him powers, possibilities, and capabilities that are his alone, and differing in a degree from those of every other child, and thus aims in his work to minister to the life of his pupils, that he may cause them to live more broadly, more richly, and more abundantly.

Probably no one factor in education during the last quarter of a century has been so potent in the advancement of teaching and the training of children as the kindergarten. It is safe to assume that every grade of school has shared in the new life. Courses of study from the primary school to the university have been recast under the kindergarten influence until the whole purpose of public-school education today is to fit the child to play his part in the various institutions of social activity.

To occupy space to discuss the physical, mental, and moral aspect of the play in the kindergarten, of creative activity, of individual development, of the sociology of the kindergarten, or its plan for a natural and logical development of those faculties used in the school-life—actual and ideal—would be taking time to emphasize what all are fully familiar with, and to repeat much of what is contained in the following chapters.

As an introduction, it may be wise to briefly review in what respect the kindergarten prepares the child for the primary school.

The kindergarten is pre-eminently a school of observation and experience, and so gives vital meaning to the facts and events which the child's first books record.

The child's contact with things, his observation of the aspects of nature and the occupations of man, the habit of tracing and observing the processes and relations of both, are the best foundations for profitable use of the simplest reading-exercises. Furthermore, the kindergarten teaches the child good literature, and believes in biasing the child's literary tastes. The poems and stories are carefully chosen, and should cultivate not only the taste, but the imagination, and fill the child's mind with thoughts that ennoble and uplift. The expression of thought in the form of spoken language is also a very large part of kindergarten training. The children are encouraged to tell what they have observed, or made, or done; to repeat stories related, and to recite memory gems and rhymes.

In the kindergarten the child gets his first training in mathematics; he manipulates objects and is stimulated to observe simple numbers, their relations and combinations. He counts objects of the same kind, and makes his own numerical discoveries. He handles and constructs with divisible objects (the kindergarten blocks) and gets some idea of simple fractional parts.

The rudiments of art education in the kindergarten are begun through brush-work, paper-work, cardboard construction, clay-modeling, and stick-laying. To construct simple but harmonious designs and objects; to combine carefully chosen colors; to produce with clay objects in nature; to illustrate with pencil and brush poems and stories, thereby cultivating the imagination; to invent wholly original forms—all these are daily exercises of the kindergarten, and lay the best foundation for art instruction.

The nature-work and observation lessons of the kindergarten connect directly with the teaching of natural science, and the first simple lessons in geography. Plants and animals in the child's surroundings are noticed, talked about, cared for; the sun, moon, stars, light, clouds, wind, water, rain, snow, are observed. Thus the children learn to regard nature's forms and processes, and begin to think about the relation of things.

The songs and games of the kindergarten, aside from their

supreme value in the development of mind and heart, are the beginnings of more systematic physical training in the grades.

In glancing over these requirements of the child who has left the kindergarten and has actually been taught nothing in the ordinary acceptance of the word, we find that he has worked, he has experimented, he has invented, he has compared, he has reproduced —"all things have been revealed in the doing, and productive activity has enlightened and developed the mind."

The time spent in the kindergarten, while not showing immediate results in the ordinary mechanics of school-life, should show far better results in the development of his character and intellectual power.

Froebel's chief aim was character-building.

Against the self-seeking system of schools the kindergarten protests in the most practical manner, for all its methods are adapted to develop feelings of kindness, of helpfulness, of sympathy with and respect for others. No one child is encouraged to do better than another, but each is stimulated to do his best. "Right feeling is necessary for true thinking; it is only when the heart is joyous that the intellect does its best work. The child depressed by discouragement, burdened with fear, wounded by injustice, or hungry for love, does not thrive either intellectually or morally;" and the first aim of the kindergarten is to see that he is happy.

CO-ORDINATION OF THE KINDERGARTEN AND PRIMARY SCHOOL

In the problem of a harmonious co-ordination of the kindergarten and primary school the observer has often encountered, on the one side, the zeal without discretion, or literal formalism, among kindergartners; and, on the other, the dogmatic prejudice of long-established custom. Here, as everywhere, "the letter killeth, the spirit maketh alive."

To be a true follower of Froebel in practice one must, like that great educator, get a complete view of the scope and function of education itself, and a clear-sighted, philosophic knowledge of child nature.

No thoughtful believer in Froebel's doctrine will claim for a moment that Froebel's exposition of his own methods forms the end of all real kindergarten work. Froebel expounded a great, all-

embracing doctrine of education, and under the very force of circumstances presented a method which he believed would and should be constantly developed higher and higher as circumstances permitted.

In the kindergarten, as in every other department of education, life means growth; and growth implies keeping pace with the advance of scientific, philosophical, and sociological discovery in the field of humanity, and skill in adapting such newly discovered truth by wise modifications of kindergarten methods in the interest of the child's best development.

The linking-together so that the chain of educational development may be strong and sure implies that in the kindergarten we shall find no formalism, no dwelling on dry facts, no set formulas; the threefold nature of the child—physical, intellectual, and spiritual —has full scope for healthy, natural, unrestricted development and expression.

With the kindergarten as a basis of our educational structure, the tendency is more and more to live and work with the children; and, instead of simply furnishing them a store of knowledge to develop the forces within them, to give them power to think and to do, and to teach them how to live.

Right living is the end of education. Power to think, power to do, the development of strength and beauty of character, are the most desirable results our schools can produce; all true education centers in the individual, and develops that personal force and power which best fits for successful living and individual usefulness in life.

The aim and atmosphere of the kindergarten and the modern school have much in common. In both the children are active, busy participants in the work that is going on.

Too many of the children who enter our primary schools at five years of age are subjected to a discipline and curriculum totally unfitted to their years, which results either in blunted sensibilities or in arrested development.

The day is past when the school existed for the development of subject-matter according to the caprices and whims of various individuals. "The education which develops good citizens and loyal members of the community aims at something more than the mere

imparting of facts; it must create ideas, help to strengthen the will, and prepare the child to take his place as a unit in the social whole." Making the child capable and desirous of living to this end is to lead him into a keen appreciation of the highest forms of civilized life—viz., the family, the state, the church, industrial and civilized society—and to make him a self-respecting, self-governing, and helpful agent of these same institutions. He is thus enabled, through social and civic selection, "to add to the experience of mankind, to reclaim new things from the mysteries which lie beyond man, and to make more perfect the existing human national institutions." The child is the *center* of development for the real school as for the kindergarten, and is no longer regarded as so much material to be "modeled after a fashion," but rather as a spiritual being full of the possibilities of development, if his treatment be in accord with the laws of his being.

In the *ideal* school the community spirit of the kindergarten is still carried out, and we find the school organized for the general good, to which each pupil is a contributing member. Such classrooms have the sunshine and atmosphere of a cheerful home; the appearance of busy workshops, in which each pupil is an interested workman for the love of the work, earnestly performing every duty with due regard for the rights of others, looking to the teacher only for direction and advice. In the school where the kindergarten is a vital part of the system the pupils work independently of the teacher; her chief duty is to train the child so as to enable him to gain desired information for himself. The value of all school-work depends largely upon the spirit with which it is carried on. "The spirit of the class is the surest criterion of the value of its work."

The highest type of school has for its ideal a community life, in which its government, its study—in short, all its movements—tend toward the realization of the highest and best physical, mental, and moral life of each individual and of the whole; a school in which the end and aim of all work on the part of teacher and pupil should be to fill every minute of every day with the best possible moral action.

All study, all school-work, moving steadily toward one ideal under the suggestion and hearty co-operation of each individual in the school, cannot fail to open new avenues of thought and discovery, to develop principles and to elaborate methods.

The correct theory of our educational system should be that the primary and kindergarten are one institution—simply a succession of grades developing naturally. The same spirit should prevail, and to a degree the same methods. As children advance there is a gradual change in the tools used, but the fundamental ideas of all the primary grades are the same—the development of the child. Freedom, both spiritual and physical, for the children should be the aim of every teacher.

The linking-together of kindergarten and school so that the development of our children shall be harmonious and continuous, and the chain of impressions perfect and unbroken, so that the community life of the kindergarten may prevail throughout, signifies that more knowledge, wisdom, tact, ingenuity, forethought, and earnestness of purpose are required of the teaching force over our country today than ever before.

The kindergarten stands for two things above all else—the community idea and the laboratory method. When we speak of continuing the kindergarten work through the grades, we mean kindergarten principles, not kindergarten material; we mean that the sweet joyousness of the kindergarten life, its activity, its interests, its community life and laboratory method, shall go on.

In schools where the kindergarten principles prevail, the pupils in the primary schools are divided into two or three groups for the purpose of study and recreation. These groups are organized so as to bring each child where he can do his best work, neither discouraged by those too far in advance nor made listless by tasks too easy to call forth his best effort. By the proper grouping of her pupils, the teacher finds the problems of discipline and good order reduced to the minimum, for each pupil in the grade is actively employed. While one group of a dozen or more is reading to the teacher, another is busy at the desks preparing an arithmetic lesson, and still a third is at the board having written work. Or, in a younger grade, one group is doing constructive work assigned by the teacher at the sand-table, or brush-work at the occupation table, and another is writing at the board what has been gained from a previous reading-lesson, while the teacher is free to give individual attention to the absorbed little group of learners who are reading.

A fundamental doctrine of correct pedagogy as applied to all

teaching is the law of growth through self-activity. But not all activity is educative. Mere doing something does not give growth. The something must be worth doing and done in an educative way. I have seen many a teacher satisfied so long as her pupils were actively engaged in making unintelligible pictures to illustrate something of little consequence, writing words or sentences twenty or thirty times, sorting colors, folding papers, etc. These activities may be of great value as means to an end, when used in proper connections, but as ends in themselves they are a waste of time and energy.)

"That is an educative act which gives the individual power to do a new thing worth the doing, or to perform an old act more perfectly. It is supreme effort within the range of one's ability which gives growth."

Two of the greatest weaknesses of our public schools are, first, a failure to realize to the *full* the organic power of the recitation with the group; and, second, the failures (in a degree) to secure independent and persistent study and work from pupils. The school, with its elements and necessary processes, is the one *great* opportunity to teach through a concrete example all the institutional virtues. Here the child should first learn to co-operate on a large scale with his fellows in organized effort. The school should furnish the pupil with opportunity to observe the advantage which comes to him from the presence of the other pupils—opportunity to observe the necessity for the orderly respect for the equal rights of all.

Not all activity involves supreme effort, or any effort for that matter. What a child does automatically is done outside of his consciousness, beyond his horizon, and without the function of his personality. Automatic activity is not educative. The child may do a thousand acts that bring no mental response, no new mode of action, nor greater skill in those already acquired.

A great deal of school-work, primary work especially, is absolutely a waste of energy because it is not educative. A large part of the busy-work of the primary grades cannot stand the test of educative value. It is not merely so much performance with material. Much of the so-called teaching is a waste of energy because it resolves itself into "lesson-hearing." To do no more than to hear a recitation is to have failed.

To quote from a well-known kindergartner:

> The kindergarten which is not inspired by Froebel's spirit stands out in sickening relief as a warning example of the wretched results to which the idea may be carried in the hands of a machinist. But the difference between primary schools is just as great, only, unfortunately, we have become used to it, and the kindergarten, being "under fire," so to speak, must be absolutely ideal in its perfection, or it is ruthlessly held up to scorn.

All educational philosophy maintains, and modern psychology has established the fact, that a child's development falls into well-marked stages, each of which has characteristics of its own and each requiring its own mode of treatment. The kindergarten develops the first of these stages.

The old idea of education, and in many instances the present prevailing one, is the idea of quantity, pedantry—so much actual spatial work must be done, so many stages studied, so many lessons learned, and so many books gone over and finished, so much marking to register quantity alone.

The ideal standard for every school should be quality, not quantity; process, not product; culture, not acquirement, in order that the child may leave school a useful citizen. The true purpose of the kindergarten has been to fit the child to enter upon the relations of life. To this end he has been taught self-control, obedience to law, justice, respect for the rights of his mates, and all those virtues which will, when put into practice, render him a respectable, useful member of society. These virtues planted in the kindergarten must be carefully nourished and made to grow in the primary school.

SUMMARY

The kindergarten aims to establish an initial understanding between the home and the school—an advantage to the school. It affords an opportunity to hold back children to a time when they are at a point of maturity when the work of the primary school should commence. It often is difficult to make parents understand the wisdom of postponing the beginning of school-life after the child is of school age. A year lost at five or six may well be two years saved later.

The kindergarten aims successfully at putting the little child in possession of every faculty he is capable of using, and at giving him the wish to learn and the power of teaching himself.

The kindergarten offers the child experience instead of instruction; life instead of learning; a miniature world, where he lives, grows, expands, and learns.

The kindergarten stands for something just as definite and necessary in the life and development of the child as does the primary school. They are one in aim, differing only in means and efforts; the kindergarten using such materials and methods as are adapted to children of that age. There should be no abrupt change between the kindergarten and the first grade, any more than between any other two grades of school.

The need of a closer connection between the kindergarten and the school over our land is acknowledged—"a consummation devoutly to be wished." We all too frequently hear that this union will fail of realization till the primary teacher has had the advantage of a full kindergarten course. A knowledge of Froebel's principles and their application is most desirable, nay a necessity, for every teacher; but that is not enough. The kindergartner must help to bridge the gap by gaining a clear knowledge of and a keen insight into the work that follows here, and of the relation of each part to the other. There should be no fetishism in the kindergarten, but always a study of the children with a view to their development, not a development of material.

No kindergartner should object to the term "teacher," when applied to herself, as if her work were apart from all other educational forces; but when kindergartner and teacher have a common purpose and spirit, the unity in education for which we are working and vaguely yearn will come to a realization. As we come into a clearer understanding of the work of each by the other, as to the purpose, spirit, and end to be reached, then we all, the kindergartners and the grade-teachers, become teachers in the highest sense of the word. We need constantly to rise on "stepping-stones of our dead selves" to higher things, by seeking for a clearer understanding of the general principles of education, by a more intelligent appreciation of Froebel's thought and of its application to the child, by a broader, sweeter, and more catholic spirit toward all our allies, and thereby to recognize the true relation of the kindergarten to all other departments of education.

II

THE PSYCHOLOGIC BASIS OF THE KINDERGARTEN

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EDUCATIONAL IDEALS AND EDUCATIONAL PROGRAMS

A sharp distinction should be made between educational programs and educational ideals. Ideas of education, like ideas of what life is and means, are gained from experience and thought, not from special experiments and tests. They are best formulated, not by the scientist, but by the poet, the prophet, the philosopher. Their truth is determined by the completeness with which they satisfy the souls of men; and those ideals which most fully satisfy the inner nature of all men in all ages are most valuable.

An educational program, on the other hand, is an attempt to realize ideals of life through certain processes. In this field the test of truth is not whether the statement of the program appeals to any man or all men as satisfactory and logical. The poet, the prophet, and the philosopher may make lucky guesses as to the results of the proposed program, or they may miss the truth even more completely than a commonplace ignoramus. The test is here not the subjective satisfaction that the program gives, but the more objective results of influencing the physical and mental activities of human beings by the actual use of the program. The results of an educational program must therefore be determined by psychological principles, and tested by observation and experiment, as are facts of other sciences.

Many of the errors that have been made in educational practice in the past, that are being made now, and that will be made in the future, are due to the fact that the results of subjective thinking about educational practice have been accepted without being tested by careful objective observation and experiment. The error and harm of this tendency have been especially great in the kindergarten and in primary education. An adult who has observed his own learning processes and development can form some idea of the processes

in other adult minds, but just in proportion as his mind is highly developed before he studies closely those processes will he be likely to make out a program for children that is unsuited to their less developed forms of mental activity. It may be that the clearer his ideal of what man should be and the clearer his idea of what the child is, the more will he try to take what seems to be the logical method of most surely and quickly changing the child from what he is into what he should be as a man. As we shall see, Froebel was especially subject to this danger.

FROEBEL'S CONCEPTION OF EDUCATION

Whatever I may say of the psychology and the educational program of the kindergarten as planned and carried on by Froebel and his followers, I have nothing but admiration for his general conception of education. He did not originate everything that is good in his conception, nor has he stated the whole truth clearly and in detail. He saw the same deep truths of life and growth that have been seen more or less clearly in one form or another by the great thinkers of all time. I know of no one, however, who has seen so many of the great truths of life in their educational aspect and arranged them in such a complete harmonious unity as has Froebel. I am not now speaking of his ideas of primary education, but of his ideas and ideals of the general educational process. These are as true for the man as for the child, probably more so; and the college needs a program in accordance with them even more than the kindergarten.

Froebel also had a marvelous insight into the child-nature and the ideals to be realized in different stages of development; but modern scientific study and investigation are making clear and definite what was obscure and poorly defined in his mind, and revealing many important truths regarding the physical and mental nature of children and the order of development that were entirely unknown to him.

Froebel in his theory of unity and self-activity (how much those words have been abused!) showed a complete grasp of what education really is—a process of inward growth into harmony between self and environment (natural and human) with one's body and soul and with the Source of all being. He realized that each

person is an individual—a unit, and that he can grow only by his own activity, and that the highest form of development can be reached only by action toward ends that seem desirable to him. One may be trained according to the ideas of another; but to be truly educative such ideas must become the individual's own. Spontaneous ideals must also be permitted to arise in the individual's own soul, given expression, and allowed to work themselves out in play and work. These ideas of what education is and should do are so fundamental and universally true that they are to be studied and understood rather than criticized.

FROEBEL'S PSYCHOLOGY AND CHILD-STUDY

Froebel's psychology is the product of a prolonged study of his own nature, of his reading of the philosophy of his time, and of mystical analogies to the processes of nature; hence it is a mixture of profound truths of mental life with unintelligibilities that may with equal reason be classed as deepest truths or as trivial analogies and (in literal meaning) evident absurdities. Its fundamental assumption that the processes of nature are the processes of mind and that the processes of mind are the processes of nature is, in the sense in which he used it, more in accord with the philosophy of the dark ages than with the theory and practice of modern science. Scientists have once for all given up the idea that the laws of nature can be evolved from the mental operations of man. The final test of truth in nature must be objective observation and experiment. In a similar way the truths of psychology must be tested by observing how the mind does work rather than by studying crystals and plants and thinking how the mind must work.

Froebel's theoretical basis of child-study was also not in accordance with modern science. He believed that by studying his own mind he could determine the stages of development of the human race and of the individual child. We now believe that verifiable truth regarding the development of the human race and of children can be obtained only by prolonged and extensive study of the facts of racial and child life. To depend largely upon introspection, as did Froebel, gives no standard or test of truth when individuals reach different conclusions.

Fortunately Froebel observed children as well as thought about how they must develop. His own nature was also in many respects

childlike, and his attitude sympathetic. Probably no single individual ever so fully understood the fundamental and universal characteristics of child and human nature as did Froebel. Yet his conception of a child was in a large measure that of a man in miniature unspoiled by training and tradition, rather than of a creature differing from an adult qualitatively as well as quantitatively. He regarded a child, apparently, as being nearly as self-conscious and purposive as an adult. He apparently did not realize that the unity in the child's mind is not only less in degree than in the adult mind, but that it is probably different in kind. In so far as a child is like a man and his development is like that of a man, Froebel knew him from studying his own development, but in so far as a child has characteristics not possessed in an appreciable degree by a man, and almost wholly lacks some that adults have, he did not know him. He gained much from observing children, but his observations were organized by his theories and used to illustrate them rather than to test or modify them. His observations of the physical development of children were less modified by his theories, and, though good, cannot, of course, be compared with modern studies in completeness and accuracy.

Froebel's theories of human and child-nature are, on the one hand, most profound, inspiring, and illuminating, and on the other, pervaded by vagueness and unjustifiable—even trivial—analogies. The reader who, because of the part that is evidently true and profound, accepts the rest as being true and so deep as to be incapable of clear expression in words soon becomes involved in his mystic system of symbolism, and is forever condemned (or transported, as one may choose to regard it) to his circle of thought. He can go on developing within that system, continually finding illustrations of its truths in his daily observations and in his own life, but he can never get outside of the system, never perceive any new truth of child-nature, but only fresh and more convincing illustrations of truths already formulated or implied in Froebel's teachings.

The results of the study and practice of kindergarten philosophy are much the same as the varying beliefs and practices of a religious system. In the Christian religion, without departing from the life and teaching of Christ as the basis, we have had rigid, body-torturing asceticism, austere, stoical Puritanism, the joyous shoutings of Methodism, the cold logical theology of Calvinism, and the

liberal thought of Unitarianism. In the kindergarten thought and practice there are as many variations, but they are not so great in degree. Fortunately liberal views are gaining ground.

KINDERGARTEN PRINCIPLES

Froebel is one of the few men who have succeeded in constructing a theory of education, formulating principles to be observed, and devising a program—all of which have proved pre-eminently valuable. Froebel's theory of education is valuable because of his prolonged introspective study and reflection upon the meaning of life. His educational program, the kindergarten, is valuable because of his prolonged sympathetic observation of children and of different modes of dealing with them. The faults of the kindergarten are due partly to misunderstandings of his theories, to misplacements of emphasis as to what is of most value, and to slowness in working out new and more effective modes of realizing his ideas. This, I think, most kindergartners will admit. Many, however, will doubtless be shocked when I say that I believe that many of the errors, defects, and failures of the kindergarten are not due to mistakes of his followers, but are inherent in the system and most prominent where Froebel is most faithfully and logically followed.

Froebel's educational program was constructed by taking the results of his observations which were generally good, and modifying and arranging them to fit into a scheme of development by which unity and the other ideals of education (so his introspection and reasoning told him) must be attained. As already indicated, his ideas of child-development were not well founded, and his expectation that the effect of the various gifts and occupations of the child-mind would conform to the principles derived from his own mathematical, analogical, mystical modes of thinking were more likely than not to fail of realization. Yet it is his principles of development that have dominated the kindergarten practice, determining the choice of material, its special educational value, and the necessary order or sequence of presentation and construction.

For example, why are the balls chosen as the first gift? Because the ball is the symbol of unity of life and motion, and because from it all other forms may be derived. These are the chief reasons for choosing the ball and making it the first gift. In explaining to the uninitiated who have not learned to think in symbols, such minor

facts as these are mentioned: "The child easily grasps the balls, finds them pleasant to the touch, and is much interested in them because of the many things he can do with them;" but Froebel and all faithful kindergartners would not for a moment admit that such facts as these are the real, fundamental, final reason for the choice of the balls as the first gift. To kindergartners they are merely incidental facts illustrating to ordinary minds great fundamental principles that guided Froebel in planning the kindergarten. Kate Douglas Wiggin says that the similar balls of different colors "enable him to make his first clear analysis or abstractions, since the color is the only point wherein the objects differ." Is this a theoretical statement, or is it founded on a study of what children know upon entering the kindergarten? Do children who enter the kindergarten have no ideas of form and color, and will they never get clear ideas of them if they do not have this first gift? The other gifts are chosen for similar reasons; e. g., the cube, as the symbol of rest, colored black and white to symbolize the day and night side of life. In the same way is their order of presentation determined and the modes of manipulating them prescribed by the law of contrast and sequence. The occupations are selected according to similar theoretical principles of symbolism and mathematical synthesis.

Froebel's observations suggested to him gifts and occupations to be used, and many of them are admirable in their effects upon the child, but the real reason for choosing and arranging them as has been done is, in the mind of Froebel and his followers, not primarily observed effects, but theoretical considerations. So long as this remains true, kindergartners can progress no more than could the scholastic philosophers who founded all their arguments upon the teachings of Aristotle and the church fathers.

I do not mean that there is no law of sequence, no arrangement of gifts and occupations that is better than another. If there is any uniformity in child-nature at all, there must be some order of activity of the child's mind that is better than others. What I wish to emphasize is that a sequence conceived as natural and necessary by an adult mind like Froebel's is more likely than not to be, in the child's mind, no sequence at all, because he is entirely unconscious of the characteristics upon which the sequence is based. A sequence must be within the child's own mind instead of in that of an adult.

What constitutes a valuable sequence to him can be determined only by his outward manifestation of attention and interest, and by the way in which the activity of yesterday and last week or last year affects that of today in the kindergarten and out of it.

Again, though Froebel emphasized the truth that the child goes through various stages of development, in each of which his treatment should vary, yet he and his followers, like other educators generally, have based their reasons for doing certain things upon the assumption that because a certain kind of training or knowledge will be needed by adults it should be given the young child. There is also a tendency among kindergartners, as among other educators, to judge of the value of educational procedure by the rapidity with which the child is being made over into the likeness of a man, rather than by the perfectness with which he is being led to realize his highest possibilities as a child. The ideal that the child should attain to the highest possibilities of each stage of development before entering upon the next is upheld by Froebel and his followers, but largely ignored in the principles underlying the kindergarten program.

His principle of the use of type forms, both literal and figurative, is based on the thought that the best type form is the perfect form, whereas psychologically and pedagogically the best type form is usually that which is intermediate between the perfect form and the greatest variation that can be considered as being of the same form. His principle of unity applied to education concerned more his own conceptions of unity than the psychological, actual, concrete unity which is shown in and developed by acts of attention and in related activities.

KINDERGARTEN PRACTICE

Kindergartens vary, but not as much as other schools, because they adhere to a common theory and because the training of their teachers is more uniform. In general, they probably give as good or better education for children under five then the average school gives at any other period of life. The *best* primary schools, however, are certainly superior to the *average* kindergarten, and in my judgment, even to the best kindergartens conducted by strictly orthodox kindergartners.

I have not the time, the preparation, nor the necessary egotism

to attempt a complete detailed criticism of kindergarten practice, saying just what should and what should not be done. A few criticisms may be suggested as illustrations of what might be done.

Froebel's principle of having a thing done or a mental state aroused, and then described in words and expressed in action, is often systematically violated by prolonged dictation, premature explanation, and artificial expression. In many kindergartens the children spend so much time in fine work, in carrying out dictations, in the tremendously difficult task of sitting still *and doing nothing* while some child is getting ready for the next thing, that they are nervous and irritable when they go to their homes.

The principles of contrast and mediation of opposites are probably worked out in many ways that never affect the child's consciousness; and the same is doubtless true of much of the symbolism of the plays and occupations. The children are led to want to do what the teacher wishes and what other children are doing by imitation and love for the teacher, but not because the child's own nature demands the doing of those things. Voluntary imitation is also too often required instead of making the conditions favorable and trusting more to spontaneous imitation.

The children are taught to express, but the idea to be expressed and the mode of expression as such are often in the teacher's mind only. Children in the kindergarten are supposed to see things as wholes and to analyze and synthesize as do adults, when probably they often do none of these, but merely note striking features or those connected with some immediate interest or thing to be done.

The gifts and occupations of the kindergarten involve mathematical exactness of perception and expression, rather than the gradually growing definiteness and accuracy of thought and motion that is the normal mode of mental and physical development. Objects in nature instead of geometrical forms for use as gifts and in occupations would probably be a great improvement, as they have been found to be in elementary drawing.

The children should also spend much more time in the open air, in working and playing with plants and animals, and in expressing their feelings and ideas regarding them. Children might be allowed to work and play freely, alone or in small groups, instead of all doing everything together under the direction of the teacher. A much greater variety of stories, games, and songs might be used, and the

children encouraged to dramatize and imitate in their own way stories and interesting activities of people around them, instead of indulging so much in fanciful analogies and the fanciful stock kindergarten games.

Some kindergartens are charged with teaching too much and demanding too much self-control; while others are said to teach nothing and to fail in developing any tendency to sincere effort. A broader, richer kindergarten program seems to me desirable rather than definite teaching and accurate constructions; but interest should be developed of sufficient strength to produce persistent effort until ends are gained. It is not especially desirable that a child of the kindergarten age shall be conscious that he is learning, but that he shall enjoy a varied experience in his stories, songs, and play, and that he get the experience of success in doing things. The fact that he thinks he has succeeded is more important than that he shall have made something that looks pretty or is well made according to adult standards.

HOW TO IMPROVE THE KINDERGARTEN

Slight modification of kindergarten practice in response to such criticisms as are given above is not likely to result in great or rapid improvement in the kindergarten so long as Froebel's authority and system dominate the thought of kindergartners. What is needed is a change of attitude so that they shall be susceptible to non-Froebelian and even anti-Froebelian truths, and will actively search for such truth. A step in this direction has been taken in the kindergarten training department of Teachers College, Columbia University, under the direction of Miss Palmer, formerly assistant to Miss Merrill of New York City.

Something much more radical, however, is needed—nothing less than an experimental kindergarten where the most cherished principles of the kindergarten shall be violated and the results noted; where the law of contrast and sequence shall be ignored and the child, instead of making one figure from another, shall make chaos of the blocks or tablets from which to construct the next figure; where the order in which the gifts and occupations are taken up shall be varied indefinitely; where forms of life shall be made first, those of beauty next and of knowledge last; where, instead of the regular kindergarten gifts, shall be used nuts, seeds, fruits,

vegetables, grasses, and stems of various kinds, together with boards, nails, spools, rings, blocks, etc.; and where an entirely new set of songs, stories, and games shall be used.

Of course, to get definite results one group of children should be treated in one way and another group in another, the results being carefully noted. The children should be observed not only in the kindergarten under these different modes of treatment, but at home and later in the first grade. A very interesting preliminary experiment would be for students to go into strange schools and try to determine by observation and experiment which are kindergarten trained children and just how they differ from other children.[1]

Experimental pedagogy is just beginning, and its most promising field at present, I believe, is the kindergarten. When children first leave the home and are brought together in groups is the time when the results of different modes of dealing with them can best be seen and tested.

Probably no better educational work is done in America today than in our better primary schools. Foreigners have noted that they are also very much alike all over the United States. Why is this? I believe it is due largely to the fact that almost every possible method of beginning various subjects and of occupying the time of children at their seats as well as of adding and omitting subjects has been tried in the first year of school where the necessity of reaching certain conventional results is felt less than in the higher grades. Although these experiments have not been formally scientific, teachers and superintendents have observed the results with open minds, and we have now emerged from chaotic variety in primary school work into comparative uniformity. Our primary school of today, it is generally admitted, is immensely superior to that of the olden time and probably to that of any other country.

The progress from logical plans for teaching to being guided by observed results is perhaps best illustrated in the teach-

[1] A little experiment of this kind was tried by the author, in a first grade of eighteen pupils, ten of whom had been in the kindergarten the preceding year, pine needles being used in free and in dictation constructions. A class of teachers who had observed kindergarten work to some extent observed the children while they worked and tried to pick out the kindergarten-trained children. They succeeded in about half the cases; or in other words about as well as if the selection had been made by chance.

ing of reading. We have had the alphabet method, the word method, the Pollard system, and a host of other systems, each of which was shown on theoretical grounds to be the only logical and sensible mode of procedure. Observation of the results of the different methods show that all have merits and defects, and the best primary teachers are now using various elements of these methods that experience has shown are advantageous and least productive of undesirable results. The fact is that if children can be interested in studying printed words a sufficient length of time, they will learn to read no matter how they begin or what system or lack of system is followed. Doubtless some arrangements make the task more easy than others, but the rapidity of the child's progress depends not so much upon the objective case of the sequence as upon the extent to which the system excites and holds his interest in discriminating words.

The chance for determining what is and what is not desirable in kindergarten practice is much better than it was in the primary school, because the children are younger, the kindergarten is not expected to fit specifically for the first grade, and because more systematic experiments and more exact observation of results may now be made. The actual improvement in kindergarten practice may not be so great as it has been for the primary school, because the present kindergarten is better than the old-time primary school ever was. However this may be, the merits and faults of the kindergarten can be determined only by changing kindergarten practice and noting the results.

Doubtless many faithful kindergartners will be afraid to go directly against Froebel's theories of the laws of development, lest the children be injured for life by such procedure. Notwithstanding the confidence they have in the child's nature and self-activity, they have more confidence in Froebel's program for developing him than in the child's own power to select, assimilate, organize, and unify all sorts of experience either systematic or chaotic for his own good. Now, I have more confidence in the child and in the judgment of sympathetic kindergartners in direct contact with him than I have in the theoretical principles stated by Froebel or anyone else. If the children are interested in the work and the teachers can see no harmful results, I do not believe harm will result from any method of procedure that may be adopted. Any procedure that

fails to interest the children or that appears to kindergartners to produce immediate harmful results need not be long continued.

By interest I do not mean mere amusement supplied by someone else; I mean rather the child's enjoyment of what he is himself doing; and I measure it not by its momentary intensity, but by the length of time it continues, the amount of activity it calls forth, the extent to which it leads to other more complex activities and especially the extent to which he carries on that and other activities without the continued stimulus and direction of the teacher. However varied and chaotic a child's impressions and activities may seem to be to an adult, they may be unified in the child's mind by interests that to him relate and unite them.

In some respects it is unfortunate that the kindergarten was so well planned and so successful in practice. It has had no rivals as have the various theories and methods of teaching reading and arithmetic; the only variations have been within the system in the form of different interpretations of Froebel and in details of the program. There has been no opportunity for the good features of several theories and programs to be selected as the fittest to survive as has been the case in primary work. Since such rival theories have not come forth, it is desirable that an experimental kindergarten shall be established somewhere for studying the effects of various methods of dealing with children of kindergarten age. Such an experimental kindergarten should be guided in making its experiments, not by kindergarten principles, but by the best established truths of psychology and child-study, every interest that is prominent at the age of three to five being appealed to; but the final test of the results of the programs must be the effects upon the children.

It is also desirable that kindergartners both when training and in later practice shall spend less time in trying to interpret and apply Froebel's theories of how to develop children and more in observing just what effects are being produced upon the children. The highest possibilities of the kindergarten can be realized only when, without abandoning Froebel's ideals, kindergartners are freed from the authority and tradition of kindergarten theory and practice, and have become as earnest, faithful, reverential, and efficient students of children and of principles of development as they have been and now are of Froebel.

SUMMARY

1. Ideals of education and theories and practices of education are to be judged on a different basis.

2. Froebel's ideas were good; his theories based on his psychology and his ideas of the laws of development are a mixture of truth and error, and the kindergarten practice based on them is a mixture of good and bad.

3. The kindergarten program should be changed radically in accordance with the latest truths of child-development and the results of such changes carefully observed, tested, and compared with the results of typical kindergarten practice that the good and bad of each may be determined and the best of each selected.

III

AN INTERPRETATION OF SOME OF THE FROEBELIAN KINDERGARTEN PRINCIPLES

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FROEBEL'S FUNDAMENTAL IDEAS AND THEIR EDUCATIONAL BEARING

A man who yields his entire being to his ideals, sacrificing every selfish interest to his spiritual tendencies of loving service for his altruistic ideals, the inspired enthusiast whose every thought and word and deed bears the imprint of his devotion to his mission, is a being whom no one susceptible of great and noble sentiments can approach without admiration and awe. Such a man was Friedrich Froebel. No doubt this man was the incarnate union of unusual vigor, with a love almost motherly—a union requisite to constitute a person an ingenious educator of the young and a friend of childhood.

To receive and to return love is to the child an essential condition of full growth and the enjoyment of life and happiness. Froebel had an instinctive feeling of this happiness of the child; and he found the full satisfaction of his desire for love in this communion of his mind with the mind of childhood. This trait of character was the key that opened the character of womanhood in general to the understanding of Froebel and made him the most sagacious interpreter of the wants and the vocation of woman. This is the explanation of the remarkable fact that Froebel's method of education attracted few young men students, and that there is rarely found a true woman who on being introduced to the principles of the kindergarten does not understand them and begin to practice them with an enthusiasm akin to that of Froebel himself.

The difficulty of understanding Froebel's writings in the original is so great that there are few persons who would attempt to interpret his meaning; and the difficulty would be further increased in an exact translation.

Froebel was convinced by experience that education, in order to be fully efficacious, must begin much earlier than at school age;

and he engaged the sympathies of womankind to carry this out. He saw clearly that the education of man must begin at his birth; or, to be quite correct, years previous to his birth. Such an education must necessarily be self-education. Naturally, and almost exclusively, it is found within the power of woman thus to educate herself. Froebel looked upon woman as the true natural educator of man. The conviction that education was the vocation of woman grew to the intensity of a faith in Froebel's mind, dominating his whole being. This faith proclaimed that woman had not a holier vocation—if in fact she had any other—than that of the education of man. And thus Froebel speaks of the training of woman in normal classes for her sublime mission.

Froebel's aim was the advancement of the interests of early childhood and the progress of the education of man in general. With this conviction Froebel stepped out beyond the narrow boundaries inclosing the kindergarten and the school, and began looking upon the whole life of man as a realm in which to render effective the art of the education of man.

Froebel recognized the threefold nature of the child; viz., (1) a child of nature; (2) a child of man; (3) a child of God.

As a child of nature he has a body which unites him with the material world. As a child of man he attains through his senses the power of thought, having that which no other animal has, namely, intellect, mind. As a child of God he has a soul, a spiritual nature apart from his body, and eternal life.

Inner connection is Froebel's chief category; and finally he comes to seek a correspondence between the inner connection of the unfolding faculties of the child and that which exists in nature. Thus we find in Froebel's philosophy of education (1) inner connection between objects of nature, namely, evolution; (2) inner connection between the faculties of the mind, namely, mental development, or education; (3) inner connection between the subjective and the objective, between mind and nature.

The basis of the kindergarten is *organic unity*. Its characteristic process is *creative activity*. The law which brings the means for work and play into a whole is the law of the *connection of contrasts*. These contrasts do not refer to things in themselves, but to qualities common to all things.

Every object in the kindergarten must be considered as a key

to the outer world and as an awakener of the inner world. In other words, each object must interpret the external and rouse all the activities of the child. Hence the following rule: Appeal to the thoughtful nature of the child: (1) to his thought by the suggestive and explanatory word; (2) to his feelings by the association of each play-gift and occupation; (3) to his activities by requiring him to handle, to divide, to reconstruct, to transform, to combine, and to create.

Evolution is the principle in the kindergarten work, all things being developed one from another in progressive stages. All that seems merely play to the child has a definite purpose; and this is true throughout all kindergarten work. The child, by the intended uses of the kindergarten play and occupation means, also develops originality by the exercising of his power of invention. He learns concentration and a willing obedience; by being active his hands acquire alertness in making the many different forms; he learns to use his eyes, to compare, to observe and imitate the things that he sees around him every day; his mind is developed by the constant use to which it is put; and he acquires mental activity by reproducing and comparing forms. Thus, by playing, the child's manual, mental, and moral activities are strengthened; and his character development is considerably advanced.

Kindergarten work without the kindergarten idea, like a body without a soul, is subject to rapid degeneration and decay.

The scheme of Froebel's first kindergarten was "not only to take under its care children under school age, but also to give them occupation suitable to their nature, to strengthen their bodies, to practice their senses, and to keep busy the awakening mind; and in a pleasing manner to make them familiar with nature and man by properly directing their minds to the first cause of all life—God, and to harmony with themselves."

Froebel called his institution "kindergarten," because he held it necessary that a garden should be connected with it, and because he wished symbolically to indicate by this name that children resemble the plants in a garden, and should be treated with similar care. In a letter to one of his pupils Froebel states what he meant by a "true and genuine kindergarten," and compares the kindergarten with the German oak, saying:

In a true kindergarten I seek the same thing that I find in the young oak tree, which was to the Germans of old the symbol of power, perseverance,

etc., and the bearer and harbinger of a higher life. The oak answers the idea of kindergartens, as I understand it. An oak is a tree; and the idea of *tree* is therefore also contained in the idea of *kindergarten.* Persons who hitherto mostly founded kindergartens range them merely under the general idea of "tree;" but as birch trees, fir trees, elder trees, poplar trees, linden trees, and beech trees are all trees, so there are kindergartens which are like the delicate birch tree, or the talkative poplar tree, or the egotistical fir tree, or that have a similarity with the abundant foliage of the beech tree; but none of these are like a young, firmly rooted, symbolic German oak, from which in time would develop a sacred oak grove where the gods dwell, and which would generate a sacred race and people among whom the gods would like to dwell. And for this are required a good and rich soil, suitable surroundings, and persons who in their will and action resemble the oak; who, so to say, are oaks. Without the aid of such people we shall never reach our aim.

The fundamental principles expressed are that the thorough improvement of our educational systems is to be secured by beginning with the life of the individual; that education should assist, but never disturb, a free development of the individual in accordance with human nature; that the general aim of all education is to educate morally free and practically able religious men and women; that the present time requires particularly that education should tend to the formation of character, to develop power of will, and to do what is ideal, beautiful, and sublime—to cultivate the heart.

Froebel's education is the safest foundation for the early education of children, holding within it the leading features of all degrees of higher education; and to adhere to his simple and beautiful ideas based on nature means progress in every direction, even as nature moves on, naturally, but unerringly.

Much of the success of the kindergarten is negative and consists in preventing harm; and its positive success is so simple that it cannot be expected to attract more notice than fresh air, pure water, or the merit of a physician by whose efforts a family is kept in good health.

As never before the fact is understood how detrimentally premature schooling affects the sound development of body and mind, how it destroys all the freshness and pleasure of learning, and how frequently it burdens a whole life with the most mischievous consequences.

The first impressions are verily controlling for all subsequent periods. "Make the bridge from the cradle to manhood just as long

as you can, by having your child a *child* as long as possible. Be not in haste to force your child into premature development by intelligence, or by anything else. Let it be a child, and not a little ape or man running about the town." Froebel writes:

> Can you tell, O mother, when the spiritual development of your child begins? Can you trace the boundary line which separates the conscious from the unconscious soul? In God's world, just because it is God's world, the law of all things is continuity, and there are and can be no abrupt beginnings, no rude transitions, no today which is not based upon yesterday. The distant stars were shining long before their rays reached our earth; the seed germinates in darkness, and is growing long before we can see its growth; so, in the depth of the infant soul, a process goes on which is hidden from ken, yet upon which hangs more than we can dream of for good and evil, happiness or misery.

Froebel's book, the *Mother Play and Cosseting Songs,* was written for mothers. From mothers he has learned what he has written. The book addresses itself to all women who have charge of children, and thus represents the mothers, assisting them to the consciousness of their duties toward children, and to a lofty conception of those duties. Froebel follows in this the instinct of mother and child. He exercises the child's limbs and senses by making proper connections with his experiences. These exercises are entertaining for the child, and as the child grows and develops he finds pleasure in the movement of things he may see about him; and Froebel draws these into his "play and song circle," so that the children may be in living familiarity with what is in nature outside of them. With this is always connected the representation of that which is seen by the child, thus satisfying his inborn desire to express his strength, his self-activity; and as imitation and imagination are strong in children, when older they may proceed to represent the actions of creatures and movements of things represented in these songs. Woman becomes here the educator. In watching the many-sided development of the child's character, it will be constantly seen that there arise endless varieties and conditions. Within the child there may be found defect germs, as also slumbering talents, both having chances to develop in later years; and hence it should be the educator's aim to strengthen the good in the child. This book was not intended by Froebel for a practical handbook. In its simple form all are enabled to understand its contents; and

it should be in the hands of every woman so that one of Froebel's principles may be practiced by them; namely, to draw out for themselves from it what may be needed in their family. This would not exclude a better revelation and insight given to them in mothers' classes or conferences.

Froebel's aim was ever that his principles should be rightly understood, and also that these should be correctly practiced in the task of the children's education. He provides for the little child precisely that recognition of a "God-given power" within him in which is contained a power capable of changing the world. The child who starts life with the sense of divine self as the true self is safe indeed. And young girls and simple-minded mothers can understand this.

Froebel becomes ever more understood owing to the thought of the evolution of spiritual life. And hence it will be ever better comprehended that, for instance, the aim in setting the child to work in one or another of Froebel's play-and-occupation means is not to tie the child down merely to the mechanical action, but to put him at once in the right relation to the material (matter) and to the Creator; and not merely as an investigator of the material world. That this correct relation might be brought about, Froebel provided materials exactly fitted to tempt the child to use the same. Thus, the fingers learn skill, and the eyes learn to see color and form correctly; and the senses are pleasantly and skilfully trained.

Froebel insists that by his plan the child is spiritually trained. He also provides for the universal law of symbolization by which everything stands for some idea. The symbology of the occasion satisfies the child's fancy. Further, he insists on the great spiritual law that we can see only what our eyes are ready to see; and that we can know only what we are ready to know; and that we do only what we put our will into.

Froebel constantly asserts that our aim is to have life, and to have it more abundantly. The aim is absolute self-control over self and life, and its affairs. "The kindergarten was created as a protest against that power which would retard free thought and self-expression; and, true to its inherent possibilities, there is scarcely a vital life-interest which the kindergarten does not touch. Froebel's system is the only one in which the details of actual practice are the real outcome of sound psychological principles, and

in their application are continuously governed by those principles. *If ever the practice in its logical outcome should cease to be the distinct expression of the psychology, the plan will cease to be Froebel's.*"

Speaking of the historical (evolutionary) Froebel said: "A new creation must always spring from the old; and that which follows is always conditioned upon that which goes before; I make little children see this through my educational process." The so-called gifts show this in concrete things. Ball, cube, cylinder, and cone are contained one form in the other; and through manipulation Froebel makes this apparent to the little child.

Froebel said: "The experiences of my own life are to me the clearest proof of the length of time which an idea, a thought, needs for development and cultivation."

Evolution, or development, consists not so much in an increase of bulk or quantity in the kindergarten as in an increase in complexity or structure, an improvement in power, skill, and variety in the performance of the natural functions.

In regard to the effects of the kindergarten play-and-occupation means, as wisely and understandingly presented, Froebel says:

> No one would believe, without seeing it, how the child's soul, the child-life, develops when treated as a whole, and in the sense of forming a part of the great interrelated life of the world, under the guidance of a skilled kindergartner; nay, even by one who may only be simple-hearted, thoughtful, and attentive. Oh, if I could only shout aloud with ten-thousand lung-power the truth that I now tell you in silence, then would I make the ears of a hundred thousand men ring with it! What keenness of sensation, what a soul, what a mind, what force of will and active energy, what dexterity and skill of muscular movement and of perception, and what calm and patience will not all these things call out in the children![1]

"As the basis of a true kindergarten activity can only be built up upon the reform of family education, and as the kindergarten has not had its beneficent influence on generations by becoming an institution of the community, and has not produced enough well-prepared pupils, so we have not as yet the true, ideal kindergarten, and cannot speak of such institutions as completely carried out."

The kindergarten may be regarded as the "nursery of mankind." This fact speaks in itself for the importance that is attached to the true training of the mother and the kindergartner.

[1] Froebel's *Letters on the Kindergarten*, p. 145.

According to Froebel it is of the highest importance, not only for the religious development of man, but for the expansion of all his faculties, that his education, starting from one point, should follow a progressive course, and should advance toward the goal uninterruptedly without breaks or sudden changes. For nothing is more hurtful to the development of the individual than to consider any stage as detached or isolated from the rest. The periods known as childhood, youth, adolescence, manhood, old age, are but the links of one and the same chain; and consequently the little child, the youth, the man in his maturity, cannot be looked upon as different beings, strangers one to the other. Life in all its various phases presents one complex whole, of which it must be our care to consider the starting-point and the ultimate goal.

Froebel considers each human being as a "part-unit" equipped with talents and powers belonging only to him; and as such he is to be respected. As part-unit the human being is limited to certain degrees of development, and has to subject himself to certain laws. The child also has to subject himself to the order and regulations of the family, the playground, the kindergarten, school, etc.; and neglect means abandoning one's duty. To find the equilibrium—this is the educator's duty.

From this it may be inferred why Froebel laid so much stress upon the idea that the kindergarten play-and-occupation means form a whole, and that each part of it, singly, is to be regarded as a thing by itself. The law of the connection of all things shall govern the kindergarten; and this should be brought about clearly and simply, so that by means of his play-world the child may be led to find his way in the world that surrounds him. Lengthy explanations cannot do this; but the kindergarten materials offer the means; and the law of the connection of contrasts used by the child in the kindergarten is the same as that which governs the world, transforming one thing into another. Thus the kindergarten work, being in the service of education, cannot be the aim and end; it serves as a means to educate the child. Hence the value is found in the influence of the work; it leads to a better acquaintance with and insight into the outer world, the world of the senses, and the connection the things are having one with another. To break this connection would be to lose Froebel's idea.

The better the proposed aim has been understood, the better the

method used and the process followed, the more active part the mind takes in what is done, the higher will be the result. Mechanical imitation is the lowest degree of the series in all steps, while the highest is "free creation" of forms generated in the mind. Between these two there is a whole scale through which the crude work of the hand rises later to a work of art. There is no other way to give to childhood that preparatory education which is needed for life.

Health ought to be the aim of the educator's care and efforts in regard to the child, both moral and physical health.

The child is the product—the result—of the generations which have preceded him; he is the visible link which connects the past with the future; and he bears within himself the consequences of all that has gone before him. In him are the germs which may be developed for good or for evil. The main aim is to try to develop what is good, and subdue what is evil.

Education begins from the birth of the child; and, to be rational, education should consist in a wise employment of the resources to be found in nature; above all, it should not be the instrument of the will or fancies of the educator. To wish to improve on a child's own tastes and occupations or ideas is a puerile and selfish way of contemplating childhood, and sometimes leads to struggles which are dangerous to the character. Simple teachings in direct lessons—an atmosphere rather than a code of regulation—prove the best and surest means for the child's education. The child is not hurried by direct teaching. He is taught by the atmosphere about him. Experience becomes his teacher as in adult life, and his lesson is learned all unconsciously without a perpetual "Do it so," or "Do not do it so." Members of a little community, they adopt its manners and morals.

The games of the kindergarten represent valuable appearances from the life of man, animals, plants, etc. In these games children find opportunity to view life known to them in a new aspect; for instance, representing pigeons and their life. When later seeing the real pigeons and their house again, the children are awakened to look at them with more interest than they would have done without such a game. A live pigeon may be brought to the kindergarten; its walk across the floor may be observed, how it turns its head, closes its eyes, and coos; even the flight of the bird is observed, how the wings spread and move. And in their imitation it will be per-

ceived that the wings remain straight, that there is no undulating motion, no joint moving in the end of the wings. The child's individual development is quickly advanced in such natural manner, and true benefit derived mentally and bodily. In this game the child learns to breathe properly, to move noiselessly, to coo with a low and gentle voice. It is not *that* the child plays "pigeon," but *how* he does it. This applies to all games, play, and work of the kindergarten. If not thus carried out, all games, play, and work would be degraded, would become mechanical.

In the games the child learns intuitively actions and their meaning; and a development of the senses of form, comparison, etc., takes place. And in order to be successful, the child has to subject himself in willing obedience to the rules of the game. If the child were to grow up without such willing obedience to rules, his freedom would be just as much endangered, as if he had no freedom whatever. The games occupy a distinct place by themselves. Plays are mentally spontaneous. For the games there should be simple music and correct action.

In Froebel's methods ethical culture occupied at starting, a large place. The ethic faculty is one of the first to unfold in the mind of a child; hence, its training and culture have immediate claim on the educator. The fact that faculty is there is sufficient to show that it is one of the essential roots by which means the child's nature receives nourishment needful for his perfect, healthy, and vigorous growth.

Stories are the child's first introduction into the great world of the ideal in character and life. The imaginative faculty of the child's mind should be dealt with very carefully. All stories should have an educative value, rather than instructive.

THE GIFTS AND OCCUPATIONS DISTINGUISHED

Froebel's play-means of the kindergarten consist of two groups, the Gifts and the Occupations. They constitute one united whole, each one the outgrowth of the previous, bringing about the inner connection and relation of the law as utilized by Froebel; and in this relation both gifts and occupations become a means for the child's development through the application of this law by self-activity.

The difference between gifts and occupations is the following:

The gifts are derived by analysis from the solid, while the occupations are evolved by synthesis from the point. Furthermore, the different gifts, after having been changed into the greatest variety of forms, at the end of the play take the original form, which is found entirely unchanged; whereas in the occupations there is transformation of the material itself, which cannot take the original form again.

There is this wonderful unity of design which characterizes Froebel's given material, and his natural, simple, child-befitting plan, thought out so logically and beautifully. The chief aim of these educational means is the self-development of the child entire.

The gifts and occupations are meant to aim at giving the child impressions of form, size, direction, motion, color, etc., leading him to analysis and construction, to development; i. e., to the exercising of the inner and external senses of form, number, size, etc., in order to assist the exact perception of objects, their properties and sizes, placing the children in a condition to translate immediately these appreciations by external representations, and, by so doing, strengthening the faculties of observation. Thought and originality are stimulated, as also investigation, which, if not satisfied, would eventually lead to destructive tendencies. The elemental powers are developed to logical thought by means of logical action; and the child is thus assisted to give outward expression to his inner thought. Further, the aim is to stimulate attention, comparison, love of order, and mutual helpfulness.

Within these gift-and-occupation means is held a power of suggestion for the utilization of the play-spirit. The ear hears sounds, language, music; the eye-sight is trained to distinguish better, more minutely. The child's mind is being filled gradually with images of actual life, and the intellect is built up on this basis. This leads to comparisons and establishes the idea between cause and effect, between object and language, and between the concrete and the abstract—a valuable preparation for after-life.

THE GIFTS AND THEIR USES

Froebel gives experience instead of instruction; he puts action in place of abstract learning. His kindergarten gifts are nothing but the working-out of his theory. The ball of the first gift is the primitive form from whence issue all the others. This gift consists

of six worsted balls, each ball having one color of the rainbow, and represents the elements for intuition; form, color, motion, direction, material—all gained through playful exercise.

The ball on a string illustrates swinging motions, revolving motions, pulling and pushing motions, hopping motions. Grasping and catching the ball strengthens the muscles of the hand and arm; and the eye is educated at the same time. The games with the ball in the open air excite the healthy action of the entire body. They are the best teachers of gymnastics for the child; as, for instance when the ball hops the child may hop. Swinging the ball on the string the child may not only play "tic-tac," like a pendulum, or "ding-dong," like the church bells, but he may receive ideas of "here-there," "front-back," "right-left," "up-down," "slowly-quickly," "near-far," etc.

Whatever is expressed in the playful instructions should be articulated accurately and distinctly, in order to develop the organs of speech. If children are taught to speak well before they learn to read, they will not require special instruction in the art of reading with expression.

To catch the ball, all the child's energy is required. The mind's development must be assisted in its first stages.

The second gift, which consists of four bodies—the sphere, cube, cylinder, and cone—represents contrast of form, and addresses the intellectual rather than the physical nature of the child. Revolution upon the axis of each body gives intuition of the inner relation of these bodies.

With the child, its first play-object should be succeeded by others which give the earliest opportunity for instituting comparison. In the cube of the second gift Froebel offers the primitive form of crystalline action. The two contrasts, sphere and cube, are connected by the cylinder and the cone—which participate in the qualities of the two other forms. By revolving these four fundamental bodies the child discovers the relation that exists between the sphere, cube, cylinder, and cone. To these four bodies can be retraced all forms and existing bodies. And this second gift thus constitutes the pivot of the play-and-occupation materials proposed by Froebel. "Innocent plays" are connected with the use of these bodies.

The third gift is a cube $2\times2\times2$, divided once in each direction, resulting in eight equal smaller cubes. Here, as also in the follow-

ing three building gifts, both the intellectual and the physical nature of the child are exercised.

Without a division or resolution into its component parts, the examination and thorough knowledge of any substance is impossible. The study of material knowledge serves as a basis for the study of the intellectual things; and divisions arbitrarily chosen leave no clear idea in the mind. It is therefore indispensable that all divisions be regular and conformable to "law," even as nature. In the third year the child endeavors to investigate the interior construction of things. This was what suggested to Froebel the divided cube as a plaything; and it is designed to foster the spirit of investigation in the young mind, while at the same time it stays the destructive element. The cube is separated, and its several parts are again united so as to form a new whole form. Little stories, comparisons, conversations, aid the child in the expression of his own ideas. The child divides the cube into two, four, and eight equal parts, offering a means by which the child may acquire mathematical conceptions. Such forms are, therefore, termed forms of knowledge; they correspond to the forms of knowledge in logic. For instance: The eight cubes can be placed in line, and the one-inch checkers—which correspond to the part-cubes of the third gift—will be of great assistance for the guidance of the child. Placing the eight cubes in line, they may be connected, subdivided into halves, quarters and eighths.

The exercises may be varied in this manner:

1. Make the cube; take the two upper front cubes and place them upon the two upper rear cubes, and the form represents a miniature chair—for father or mother.

2. This chair may be divided—resulting in two chairs.

3. These two equal chairs may be placed back to back—resulting in the form of a house, etc.; always one form being the outgrowth of the previous one until finally the cube has been formed again.

With each of these forms some instructive remarks may be connected, or some truth inculcated.

Rhythm can be taught by means of simple symmetrical forms. Their object is to cultivate the sense of the beautiful and the esthetic—the result of order and harmony. These forms train the eye to see quickly and distinctly, and the feelings to reject what is unsightly, inharmonious, and untidy.

These forms are again brought about in continuous steps, having a solid center of four small cubes, and revolving the other four cubes symmetrically around this central square, adhering to the "law of opposites;" i. e., if, for instance, an upper cube is moved to the left, the lower corresponding cube is moved to the right; if the left-side cube is moved forward, the right-side cube is moved toward the rear; etc. The child exercises his mental powers and learns to express himself. After each exercise or sequence the child is left to the full freedom of using the blocks.

The basis of the kindergarten gifts is mathematical; they illustrate successively the solid, the plane, the line, and the point. The progress from the undivided bodies to separate and independent elements further on awakens the mind.

The earlier gifts are rich in suggestions, while the derived gifts extend the former range. The object pursued is to aid the mind to abstract essential qualities of objects by the presentation of striking contrasts, and lead to classification of external objects by the presentation of typical forms. They illustrate simple truths through simple application, and stimulate creative activity. The natural tendency of thought is thus accelerated by carefully abstracting from material things their essential qualities.

Each gift throws some distinctive attribute into relief. In the first gift there is contrast of color; in the second gift contrast of form is found; the third gift offers contrast of size; the fourth gift offers contrast of dimensions; the fifth gift gives contrast of angles and number; the sixth gift presents proportion of different parts in respect to size and facility to inclose space.

All exercises with the gifts can be grouped under three distinct heads, viz.: (1) forms of life—i. e., objects we see around us; (2) forms of beauty or symmetry; (3) forms of knowledge or mathematical forms.

The thinking, searching, parting, and dividing processes of the understanding—that is, analyzing—should be preceded by the taking-apart—that is, analyzing—of the solid bodies; for an arbitrary division can never lead to clear representations. The next step is the transition to the plane given in the thin wooden tablets in the form of simple mathematical ground-forms.

With the tablets, the seventh gift, the child can no longer represent real objects, as was done with the building-blocks, but only pic-

tures of these. The shape of the tablets is of two kinds, square and triangular. The latter are again divided into four kinds of tablets, viz., right-angled isosceles triangles, equilateral triangles, right-angled scalene triangles and obtuse-angled isosceles triangles.

The forms made with each kind of these tablets are again grouped under three heads; life forms, symmetrical forms, and forms of knowledge. The child proceeds slowly, and connections are made with objects surrounding him and with his experiences. The combinations of forms in each series are numberless; but the elementary forms are few in number and limited in variety.

The connected and disconnected slats of the eighth and ninth gifts render the contrast of form even more striking by the child's self-production of the same. These slats represent partly the surface and partly the edge of the forms of the previous gift. The connected slats, by means of rivets which connect the ten equal slats, can be shifted into various outline forms, grading the process by number and in the slat-interlacing of the ninth gift single slats are interlaced into a variety of forms. These gifts form a starting-point for becoming acquainted with angles and the direction of lines; parallel lines are distinctly seen, and geometrical outline forms are easily derived by the child's own effort.

With the single disconnected slat not only direction of lines are playfully reviewed, but the slat can be used for measurement; the elasticity of the pliable slat offers many happy exercises in regard to sound and rhythm; while the interlacing of many slats leads the child again necessarily to the exercising of the law of opposites, to the appreciation of forms of use and forms of symmetry. It is the perfect simplicity that makes the play-work so clear and strong.

In the tenth gift, stick-laying, the little sticks from one to five inches long represent the embodied edges of the cube, carrying the child another step in advance from the concrete to the abstract. The sticks form the material for making outlines of objects, sketching outline-forms with embodied lines. The child receives at first only one stick, gradually increasing the number, which are held together with a string. In opening such a little bundle the child instinctively divides the bundle of five or six or ten sticks into five or six or ten units. The possibility of these sticks in the development of forms of life (forms of objects surrounding child-life), forms of symmetry, and forms of knowledge is capable of worthily engrossing the

maturer mind and intellect. The imagination of the little ones is a factor without limit. Its material can lead the child to the different avenues of observing wooden objects and their uses, as also to nature whence the stick has been derived. The network of squares on the kindergarten tables is here again a valuable guide. The sticks are admirably adapted to teach numbers and the rudiments of the rules of arithmetic.

The letters of the alphabet can also be laid and may be combined into short words, if the child is sufficiently advanced to do so of his own accord. Froebel gives an excellent example of this in his letter to his god-child. The main point of this gift, again, is that the child develops through creative activity.

The eleventh gift, ring-laying, consists of wire rings or circles and half-rings, of three sizes: one inch, one and a half, and two inches, respectively, in diameter. By means of these the child becomes familiarized with the properties of the curved line, by laying them in different positions and arranging them in various ways and combinations. The symmetrical forms predominate in this gift. The method is the same as in stick-laying; number is the guide. The material of these rings becomes a new point of interest. And finally the tenth and eleventh gifts are used combinedly, always adhering to the method, yet after each exercise giving the child freedom to shape and form as he pleases.

In the twelfth gift, the thread-game, a worsted thread of bright color, representing the pliable line, is used. Its ends are joined illustrating the circle as an equally distant line from its center; this the child has to arrange himself. The thread must be saturated in water and is used upon the surface of a wet slate to which it adheres; and with a little stick or slate pencil and the fingers the thread is moved about to produce the three groups of forms. This is "drawing with a given pliable line." The dry thread is also used for various hand games, "cat's cradle" for one. Also knots can be made in pretty variety, letting number take the lead. An amount of general knowledge will again be acquired; the materials—the thread, slate, and water—inducing the child to bring forth his little store of facts.

The thirteenth gift, the embodied point, represents the smallest portion of the body. Seeds, pebbles, or small shells may be used, such as are qualified to form lines. The materials lead to grouping and assorting, the aim being to make the habits of the mind and

body orderly, practical, and logical. The material is again used in relation to the network of lines, and in accordance with the three groups of forms found in all of the previous gifts. Points are joined to form lines; and lines of various directions are combined to make outline forms.

THE OCCUPATIONS AND THEIR USES

In the occupations of the kindergarten the material is of a more flexible kind than that used in the gifts; but the same general principles are applied. The occupations are evolved by synthesis from the point; and there is transformation of the material itself which cannot take the original form again.

The occupations have a far higher aim than merely to develop dexterity of the hand; for this would degrade them to mere mechanical work by leaving the principle and aim of the kindergarten entirely out of sight. In the first occupation the point is simply treated. Perforating is one of those occupations of the kindergarten which are greatly misunderstood. This occupation represents that which is beautiful, not only because it is the child's activity, but mostly because it is the child's invention. The child gains the habit of seeing sharply and accurately, of judging distances and directions; and the intellectual faculties are called into action while the child is perforating the various forms. The most important feature is the effect on the esthetic nature. And the product of his activity not only gives pleasure to the child, but serves also to give joy to others. Mathematical intuitions are brought near the child by his own effort, but also an opportunity is given to impress on the mind forms of things that surround us. A piece of card is given, covered with the usual network of lines; and upon this the child finds and marks—perforates—his forms with a coarse pricker. Illustrations of contrast similar to those illustrated in the gifts are further applied in all the occupations. The true kindergarten idea is centered in the all-pervading connection between the things of sense and the things of thought. According to law the mind moves from the known to the unknown. The first use of the occupations is to train the eye and mind to become ready servants of the will. Froebel uses the full-grown and the mature human being in the babe. Therefore his method is that of

nature herself, which always has reference to the whole, and keeps the end in view in all the phases of development.

The second occupation, sewing-out, calls the dexterity of the hands and fingers and the muscles of these into activity, and trains the eye in accurate measurement. Perforating and sewing-out complement each other. Sewing-out may be regarded as a kind of drawing with various colored threads upon a network of lines forming squares for a guide. While Froebel applies this occupation in a way which trains the mind, yet it is often allowed to be performed mechanically, The child, in the proper application of this occupation, is obliged to think, to count, to plan, to be attentive. The inventive power is again incited and further developed, always considering the age and development of the child. The mode of process here is determined by the peculiarity of the material used (perforated cards and worsteds) and the lines to be used. It is a process peculiar to itself. The law of opposites is easily recognized in this occupation. Forms of life may be represented—the child "finding" his own forms. Also simple outline forms of objects, flowers, insects, birds, and animals may be given and sewn in appropriate colors.

The third occupation, drawing, is commenced by Froebel at an early age; he regarded it as an early means of culture, and, as such, demands observation, attention, recollection of what has been seen, power of invention, logical thinking.

Froebel has prepared a system of linear drawing so simple that it is easily understood by children, and yet is sufficiently involved to tax the powers of mature minds. This drawing series is a microcosm of the whole plan of kindergarten education. The elements are simple in the extreme, and few in number; each series has different lines to deal with. According to the law of opposites or contrasts these lines are arranged, rearranged, and composed into larger forms. Ever new combinations are developed, leading the child finally to find the points, by connection of which a circle may be drawn without other help. Children having entered the kindergarten when four years of age will be able to draw these forms, according to direction, without much effort when six or seven years old; and this leads to a correct representation of the curved line, quarter, half, and whole circles.

As in all the gifts and occupations, so here a certain freedom is

granted, the child using certain lines, drawing these either to represent symmetrical star-like forms, or simple representations of objects he sees about him. The creative power will here develop again. By conforming to a certain rule, the imagination will expand, whereas otherwise it would degenerate, and simply wander aimlessly about, bringing forth no results. Even the greatest artists and inventors are compelled to obey some law.

The fourth occupation, coloring and painting, combines the chief elements of graphic art: form, light, shade, and color. The network of lines used in coloring is of a larger size than that used heretofore. The process is from line to surface. Crayons of primary and secondary colors are used, outline forms (geometrical) are made and filled in with parallel lines, until the child is able to produce a surface in orderly manner. This first drawing with colored crayons corresponds to the tablets in the seventh gift. Soon the possibilities of pretty designs will be increased, always using the rule of "freedom" with certain limitations. The brush will be substituted for the crayon, when the child experiments in making his own colors by mixing the primary colors and represents surface forms on a large network of lines. These forms are again classified under the three heads as before. Also, free exercises without limitation are allowed after each serial exercise.

The fifth occupation, paper-interlacing, leads over to net-weaving. Long strips of colored paper are interlaced into pretty symmetrical designs upon the basis of simple geometrical forms, showing that these, when combined, produce figures of much beauty.

The sixth occupation, mat-weaving, is used to weave strips of paper into a continuous web, representing a surface, teaching the child combination of colors and calculation of numbers, to produce patterns within the limitation of the first five numbers. This leads again to an independent effort, resulting in free-weaving, easy cane-work, and basket-making.

The seventh occupation, paper-folding, consists in bending and folding over the edges and corners of a given piece of paper—square, oblong, triangular, or circular. This occupation applies to the child's sense of form, of place, number, and size, as well as of objects resembling the forms folded. Valuable instruction is here again interspersed. Fundamental mathematics are thus taught to the child up to the tenth year, and are then elevated to ideas. Hence,

this occupation, after having served as a means of play and employment in the kindergarten, becomes for the same child, later, an esthetic, technical means of culture.

The eighth occupation, paper-cutting and mounting, represents the separation of the surface and the reunion of the parts to a whole form. Analysis and synthesis are here combined. This occupation also corresponds to the tablets. A $5 \times 5''$ square piece of paper is folded into an eight-fold double triangular ground form, containing a network of lines upon its upper surface; and by this the child is guided to cut the ground-form vertically, horizontally, diagonally; i. e., once or twice in parallel lines; or, as advancement takes place, parts of the form are cut out; and the form and its parts are then assorted, rearranged, and mounted symmetrically. It is drawing with scissors without pencil-marks, the only guidance being found in the network of lines on the ground-form. The forms of knowledge thus cut from the ground-form are based upon geometrical calculation. Free cutting is cultivated after the regular exercises.

The ninth occupation, pea-work, consists in the connection of peas and sticks, to form the outlines of surfaces and the skeletons of solid bodies. That which in the preceding gifts was solid is in this occupation transparent. The child makes here again in outline, all the forms of previously used gifts and occupations, geometrical outline forms, symmetrical forms, and miniature forms of real objects. Prisms and pyramids and crystalline forms can be represented with little effort. The letters of the alphabet may be made.

In the tenth occupation, paper-modeling, the previous forms are reviewed, while here the surfaces receive the chief consideration. Paper, covered with a network of half-inch squares, is measured, cut, folded, and shaped to represent, as in former instances, (1) forms of knowledge, (2) forms of life, and (3) forms of symmetry.

Children can easily learn how to make a box; and this is used in teaching them numbers, addition, and the multiplication table by their own work.

In the process of synthesis, paper modeling stands between planes and solids; these forms are now built up from the plane. Thus a set of prisms and pyramids are designed, made, and combined, starting with the cubic form and reaching up to the dodeca-

hedron and icosachedron. Free work is finally the outcome of each directed set of forms. This is indeed a valuable foundation for the future study of mathematics.

The eleventh occupation is modeling in clay. The first steps in this occupation are very simple. The beginning is made with damp white sand on a sand tray. In clay-modeling the so-called "forms of life" are at first predominating. The child becomes, by imitation, a tradesman, shaping small forms of bread, making a ladder, a boot, a hat, etc. Fruit is imitated in miniature forms, also vegetables; imprints of leaves are taken, becoming a first lesson in botany. Chinaware is imitated, and tinware; furniture even is attempted. These forms are developed from the four fundamental bodies of the second gift, and their division into halves; and further from the surface of the half-body. For instance: It is easy to shape an apple from a sphere; from the half-sphere, a bird's nest or a basket; from the flat surface of the half-sphere, a plate or tray. The cubic form could by slight addition be shaped into the form of a trunk, etc. All the previous bodies of the gifts can be reproduced by means of the pliable clay, and used for fundamental forms of objects.

Flowers can be copied and arranged on a plaque, and by so doing the children will be led to discover many things by themselves. The fourteen stereometric ground-forms are intended to be made by older children. The different geometric bodies can further be applied by joining several of them. And, finally, a first step toward the understanding of art may be taken by leading the child to represent the column; and this may lead to the representation of a building.

Froebel means for the educator to go slowly and surely, thus impressing the child far more than if he were assailed by a crowd of new forms, sights, or sounds. And, as the child moves the objects, measures and shapes them, talks and sings, he is imperceptibly guided to move in accordance with them. Conjointly with this, the way is opened toward training the will in the right direction. And as there are many opportunities given for bodily exercises during the gift-and-occupation work, so there are also many for moral culture. Equally the affections and the artistic powers receive notice, while companionship is influenced in developing social qualities. While playing with the gifts, there should be

connected with this body movements whenever possible, thus reducing any strain that might otherwise occur.

From the objects and forms made in the gifts the possibilities of rich symbolism are striking, furnishing means for development of mind and body.

Language is developed, and the tone of the voice is trained. This is one of the points which should receive special attention as a preparation for the school; and this point is of importance. All actions should be connected by word; and hence free and personal conversation should be encouraged.

The process of both gift and occupation-work is again from imitation to dictation, being followed by suggestion, leading eventually to original work, invention. The guided work always precedes the free work; and the law introduced into the guided work, being gradually absorbed by the child, will later rule the free-inventive work. Froebel gives to the child freedom within certain limitations. His careful analysis of child-nature and his intimate knowledge of children afforded him the practical insight into the early educational process that makes his ideas so fruitful and important.

The key to the arch of the occupations of the kindergarten is the transformation of material. The related continuity is here again of the greatest value. The work is merely the means of educating the child. The visible, material production of the hand has a subordinate value, because the value lies in the influence which the work has upon the child. All-in-all it is the spirit which prevaileth, which cannot be exploited as a method. Nor can this spirit or harmonious atmosphere in the kindergarten be analyzed, for it is a subtle one. What is needed is the breath of the spirit which lives and breathes in Froebel. And wisdom is needed, to discern those things which make for true freedom. Froebel gave the suggestions and the examples, whereby he merely pointed out the way and the manner, not meaning them for imitation. The great law which finds expression in manifold nature is not limited. By means of using the same great law, true freedom is attained in the highest possible degree.

Nothing can take the place of gifts or occupations. Nature material may at times prove a greater incentive to expression than the gifts, though it cannot supplant them. Nature material has its own value, being used advantageously to enrich and to expand

the kindergarten materials as seasons or occasions may offer. To leave out but one or another of the gifts or occupations from the plan would create a gap in the logical process which makes it all so valuable and important.

An important question arises as to whether the child should be permitted the necessary length of time in the kindergarten, or whether, as designed by Froebel, the gifts and occupations should be continued in their extended development in the connecting class—the primary and the elementary school.

In the kindergarten we deal with pedagogics, and not with the invention of a number of entertaining occupations and plays. Were this idea left out, the kindergarten might be abandoned altogether. Froebel's series of play materials have the singular advantage of being all linked together, leading from one to another. It is true and practicable that most of them can be used separately, while they retain their educational value in providing children with a useful material on which they can exercise their industry, constructiveness, and inventive power. The greater value, however, lies in the fact of following one another by reason of connective necessity. This is true not only in the connection shown by the kind of material, but also by their adaptation to the age, and mental and physical powers, of the child.

Froebel designates the spirit and character of his play-and-occupation means thus:

> They proceed from the unit resting within itself and develop according to the laws of life in all manifoldness. They commence with the simplest, just as they recommence on each new step again conditionally with the simplest, but later progressing to the nature of things and to the laws necessarily resting within them from the simple to the complex, from the undeveloped to the perfect. Each part that is being offered is always in itself a complete whole, and may thus be regarded as a seed or a bud from which necessarily new formations have to emanate. And these play-means have to embrace, as a whole, in process of their exhibition the entire field of the general intuition instruction, the foundation of all future instruction.

And Froebel's practice corresponds wonderfully with his theories.

The law of contrasts and their mediation Froebel recognized as being the law of development in nature and in man's life, and thereon he founded his play-and-education means. Each single

form offered—let it be ever so small and simple, or ever so large and complicated—is within itself a complete whole, and he thus likened it to a seed or bud from which necessarily proceed new formations. According to this condition, all the different gifts and occupations are gained necessarily as an outgrowth from one another in logical sequence; and hence, leaving out but one of them, the chain, linked so beautifully, so naturally, i. e. lawfully, is broken, and arbitrariness or disconnectedness sets in. And as a reflex and impression of all the child's doings will be found on his mind and character, the influence of cause and effect can readily be detected.

It is not in Froebel's plan to follow a program at the expense of sacrificing the true development of the child. The idea is that a program should fit the needs of the individual child's development, and not the child's capabilities be made to fit the program. Neither is it in the idea of Froebel that even an attempt be made to do a certain amount of work in a given time without regard to the individual.

The child is led to find succeeding steps, while dictation is valuable because of developing correct attention. The free activity in accordance with law gives a true measure of the limits of the intelligence and stage of the child's development. And, if doing healthy work, the child will foreshadow the next step following. The proof of the greatness and naturalness of these laws is seen when children of different generations arrive at like results.

Froebel says:

> These employments aim at, and produce in man first of all, an all-sided development and presentation of his nature; they are, in general, the needful food for the spirit; they are the ether in which the spirit breathes and lives that it may gain power, strength, and extent, because the spiritual qualities given by God to man, which proceed from His spirit in all directions with irresistible necessity, appear necessarily as manifoldness, and must be satisfied as such, and met in manifold direction.

According to Froebel, the gifts and the occupations contain the universal elements of proper work for childhood; though they must be so understood as to be applied by the child according to the principles laid down by Froebel, or else they lose all their power for good, and may even tend to become harmful. To develop self-activity in the child does not mean his being busy; but that by his own effort he learns to overcome difficulties and perform duties unassisted, enlisting his entire self.

The gifts and occupations must not be regarded merely as toys. The educational value of each must be brought out. Each one is a means by which the child is assisted and led to observe, to examine, and to remember. To bring out a thought each day, making a change at the right moment, and not binding one's self down with iron-clad rules, will be found the true method. Lengthy sequences often forced on children's conclusions, and wearisome to the little child who only just begins to make connections, are not in place, and must prove harmful. Also what may be termed lessons in botany, zoölogy, geometry, etc., are out of place as separate studies. However, conversations and stories about flowers, animals, birds, and insects, introduced at seasonable times in simple, pure language, leaving out all technical terms, but emphasizing the most important characteristics, will leave a much more lasting impression than the most imposing language which conveys no idea, but remains scarcely a matter of sound to the little ears.

Children love change; and one subject carried on for days will tire the young brain. There is also harm in detailing too much in work or play. The whole plan or disposition of the future adult being is revealed in its most delicate lineaments in the child's playful activity. Whether the future life shall be sullied, peaceful, or rent with passion; industrious or indolent; whether it shall be a kind of dull vegetative existence, or a life full of high, conscious purpose; a life at peace or at war with society—all these questions are raised, and in part determined by the nature of and the conditions under which a child plays. In play these relations are revealed in nascent simplicity and in the unity of unconscious life. In the play, according to Froebel, may be found the germ for work. The right kinds of materials are provided upon which a little child might exercise his creative-productive energy under direction.

With Froebel this question of the right training of the creative-constructive activity from its earliest beginnings was akin to religion; it was, in fact, only another side of religious training. "Important as the first religious training is," he says, "early training to industry is every whit as momentous."

Froebel must not be copied; but the spirit and the law he put into his system must clearly be understood. The educators of these young children must not be mechanics of the kindergarten, but artist-kindergartners.

The object of Froebel's constant observation and reflection was *the growth of character.* And the practical measures he advocated have deeper reasons than those of expediency; for they lie in his views concerning the constitution of man, and his relations to the world, and to his Maker.

Froebel, a religious man, calmly adopted in 1826 the conception of evolution as a revelation of the Deity, applying it to a body of facts very different from those of physical science. Froebel turned a microscopic gaze upon the dawnings of individual mind, which is in harmony with his wider outlook upon the world of living men, of history, and of nature, and which must be seized in their reciprocal relations and with inevitable reference to the great goal of all things.

A very strongly marked characteristic of Froebel's mental activity was a craving to bring isolated things, facts, into some general relation. Froebel's sensitiveness to the relation of facts, moral and intellectual, the strong search to establish harmonies of relation as a principle to be kept in view in the field of education, is impressed upon everything Froebel ever did or said. This truth he symbolized in the *Mutter und Koselieder,* saying:

> Treib mit deinem Kinde Nichts beziehungslos,
> Sonst wird es dadurch leicht erziehungslos.
> "Do not practice with your child anything without relation,
> Or else he may become thereby bare of all education."

On the vast bearings of this principle are built up the kindergarten gifts and their uses, and the kindergarten occupations in their intelligently connected relations. Man is endowed with creative power—and this is the deeper meaning of all work. We do not work to get a living, but because it is the appointed means whereby alone we can develop the divine possibilities within us.

Children are much nearer the inner truth of things than the adult is; for, when their instincts are not perverted by the superfine wisdom of their elders, they give themselves up to full vigorous activity. "Their's is the kingdom of Heaven."

SUMMARY

To assist natural development toward its destination, education is to begin with the child's birth.

As the beginning holds the entire after-development, so the early education is of most importance.

The physical and spiritual development are closely connected.

The physical organs are the first of perceptible development; and these are the instruments for the spiritual development. Early education, therefore, deals directly with the bodily development, by which the spiritual development is influenced through exercises of the senses.

Nature has indicated the right way to proceed in the exercise of the senses, in the utterances of the child's instincts; and the natural basis of education can only be found through these. Not only physical, but also spiritual wants are expressed by the child's instincts; and both have to be satisfied. The development of the limbs by means of movements stand in the first place. Play is the natural form for the first exercises of the organs; hence play with the limbs is necessarily connected with the simplest spiritual cultivation. The child's soul can be awakened early in life only by physical impressions; and these should be regulated, and not left to chance.

Froebel's play-exercises are intended so to regulate the natural and instinctive activity of the limbs and senses that the purpose which nature intended may be attained. The child thus gradually awakening, his instinctive activity will gradually become conscious action, which, as further development takes place, becomes productive action or work.

The hand—the important limb as regards all active work—has to be called into play and development from the first. And Froebel has many hand-games and finger-plays by means of which are associated the most elementary facts and observations from nature and human life.

In all organisms all later development results from the earliest; as all that is greatest and highest springs from the smallest and lowest beginnings, so education must endeavor to emulate this unbroken continuity of natural development. And Froebel supplies the means for bringing about this result in a simple system of gymnastic games for the exercise of limbs and senses, which contain the germs of all later instruction and thought; for physical and sensuous perceptions are the points of departure of all knowledge whatever.

Froebel discovered a true and natural basis for infant educa-

tion, and in his *Mother-Play and Cossetting Songs* he shows how this education is to be carried out and made the foundation of all future development. And if the full benefit is to be derived from the kindergarten, then it is essential that the educational principles and methods of Froebel should be carried out from the child's birth, as indicated in the mother-play and cossetting song book.

The starting-point should therefore be the training of mothers and all who have the management of young children. They should know how to apply Froebel's first principles of education. This is of immense importance. Woman's true development in all classes will best be accomplished by training them for their educational calling; for nature has pre-eminently endowed them for this work.

The multiplicity and variety of the kindergarten materials as now manufactured have, so to speak, corrupted the simplicity of what Froebel intended; for his idea was to use elementary forms exclusively, and simple materials, and as much as possible of these being prepared by the children themselves.

Children under seven years of age are very much alike in all countries and ages.

The heights and depths of the moral and religious nature of children will open more and more on mankind, and on the educator's deeper and clearer views of Froebel's moral idea, as progress is made in moral refinement.

Froebel took the ground that the mother should be the educator of the child until seven years old; but observation told him that no mother had the leisure and strength to do for her child all that needed to be done in these first seven years without assistants and in the narrow precinct of a single family; for the social and moral nature after the child is three years old requires a larger company of equals.

The kindergartner has always to be guided by the abilities and fitness of the child; and should bear in mind that she lays the foundation for the elements of the branches taught in school. The kindergarten does just what neither home nor school can do for the child.

Although there is a multiplicity of play-gifts and occupations, Froebel limits them with the little child at first to only few forms, small numbers, and simple colors. As in nature and in art, all forms can be led back to a few fundamental forms.

Froebel's gifts and occupations of the kindergarten form only

a part of his educational means. Language, songs, stories, pictures, conversation, garden-work, the care of plants and animals—all are intended to train and influence the child. Example does much for the child. The spirit reigning elevates work and play to educational means; for the kindergarten is not meant for a pastime merely.

With the completion of right action today, the succeeding day has been already prepared. If today by a little effort the child progresses, his courage is growing to make a better effort tomorrow. Thus the beginning is made by the child toward becoming later a useful man or woman who will give all for the good of mankind.

IV

SOME CONSERVATIVE AND PROGRESSIVE PHASES OF KINDERGARTEN EDUCATION

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This article is undertaken with the full consciousness of the fact that fairness and justice can only be approximated in any attempt to give an adequate account of the conditions and causes which gave rise to the reactionary movement in kindergarten education. The attempt is made with due humility and a sincere desire to be fair to all parties, in both wings of the kindergarten movement; therefore, any unfairness which creeps in must be regarded as a result of the partial view and necessary limitations hardly to be avoided by a participant within the ranks.

In days past kindergartners were accused of being peculiarly satisfied with the system of education which they represented. In many instances this criticism was fair, though the critics must remember that the satisfaction was with the system and philosophy of Froebel rather than any individual exposition of these. This, however, would hardly be a fair criticism of the kindergarten attitude at present, for doubt has penetrated the very heart of the movement and "divine discontent" has wrought miracles here as in all other departments of life. History repeats itself in all ages and movements, and heresy has entered the paradise of the kindergarten world, destroying the peaceful satisfaction and pedagogical egotism of happier days in our early history.

The large number of kindergartners attending educational congresses and summer schools gives ample evidence of the present eagerness for better things. Members of this profession are in evidence at all educational centers, studying philosophy, psychology, nature-study, art, music, literature, primary methods—in fact, a little of everything in heaven above, the earth beneath, and the waters under the earth. The pursuit of the university degree is among us and kindergartners are candidates for degrees in all the large universities which have opened their doors to them.

In this article the attempt will be made to treat the subject of the new movement in kindergarten education under five heads:

I. Conditions and causes which gave rise to the reactionary movement.

II. The present status of the two movements.

III. The fundamental theoretical points at issue.

IV. The points of difference in practice between the conservative and reactionary movements.

V. The present and future needs of the kindergarten.

I. CONDITIONS AND CAUSES WHICH GAVE RISE TO THE REACTIONARY MOVEMENT

More than a half-century ago in an obscure German village, remote from the centers of commerce and learning, there arose a new movement in education which its founder, Frederick Froebel, christened "the kindergarten." Ushered into its uncertain existence amidst the most discouraging influences of poverty and obscurity, the new idea called for the most rigid self-sacrifice on the part of the unknown philosopher and seer who originated it, and inspired unquestioning loyalty in the devoted disciples who gathered about the expounder of this gospel of childhood.

There is something inspiring, and at the same time pathetic, in the history of this group of idealists, who gladly renounced careers, forfeited paternal approval and bequests, and endured separation from loved ones in order to consecrate their lives and worldly goods to the service of Froebel, by going into the world to spread this new gospel among parents and teachers. In many respects the devotion of this small unworldly group to its educational ideals is as unique and interesting as the Brook Farm circle, bound together by the transcendental philosophy of that period.

It was a time when romantic souls craved a mission, and all who came under the spell of Froebel's enthusiasm, men and women alike, were inspired with the same consecration to the cause and a remarkable personal faith in and devotion to Froebel. This not only continued throughout his lifetime, but, strange to say, is found in kindergarten circles at the present time; there still being a large body of kindergartners who bitterly resent any criticism of Froebel's philosophy or methods. This attitude of devotion and zeal has been admirably successful as a method of propaganda, for in less than a

half-century after Froebel's death, his followers, working against tremendous odds, have through their enthusiasm and devotion succeeded in planting the kindergarten in the most remote corners of the earth.

While such unanimity of opinion and unquestioning loyalty were necessary in the establishment of this, as of all other new movements, the usefulness of the unquestioning acceptance of Froebel's message came to an end when the kindergarten became an established fact. In the course of events this attitude had to be superseded by a more critical attitude toward the work of Froebel, as well as of ourselves, if the kindergarten was to keep pace with other movements in education. Consequently, as the circles of influence spread away from this center of devoted followers, those who entered the work began to look at it more critically and impersonally. Up to this time most of the criticism had come from those outside the ranks, and he was a brave man indeed who dared to tread on the sacred ground of Froebelian education.

However, as the kindergarten gained ground and bid fair to survive, kindergartners themselves began to doubt the infallibility of the system, and criticism arose within the ranks. It was impossible for this more critical attitude to develop among kindergartners as long as the cause was struggling for a bare existence, and kindergartners were constantly on the defensive for it; but, when survival seemed a certainty, the next step necessary to promote growth and guarantee a future in education was doubt, and a right to difference of opinion among kindergartners themselves. This critical attitude spread rapidly within the fold, and, as conviction was equally strong with all parties, an unconscious and unpremeditated division was the only possible outcome with conscientious thinkers, holding oposing views.

It was a delicate task indeed to designate these opposing parties in terms satisfactory to each, whether distinguished as "orthodox *vs.* heterodox," "conservative *vs.* progressive," "traditionalists *vs.* radicals," "loyalists *vs.* secessionists," or "old school *vs.* new school." There are many who object to any of these terms as designating the position they hold. These would have a third party organized, which is supposed to stand upon a sane middle ground. They, however, fail to realize that, no matter how conservative or radical opponents may consider one another, no one ever considers

herself extreme, and each would classify herself as one standing on this *sane* middle ground, avoiding the fanaticisms of extremists in either direction.

Naturally, the conservative wing of the kindergarten considers the radicals dangerously heretical and revolutionary, while the radicals are equally sure that the conservatives are narrow, unprogressive, and fanatical. There is still much anxiety among kindergartners as to the outcome of this division in the ranks. Some fear that it is an illustration of the house divided against itself; others, that it is a most healthy indication of growth—the kindergarten's sole guarantee of survival and an honorable position in the future history of education.

II. THE PRESENT STATUS OF THE TWO MOVEMENTS

Nothing better reflects the history and development of the kindergarten movement than a comparison of kindergarten conventions in the past and those of the present. In the earlier days of kindergarten conventions only such subjects as "The Threefold Nature of the Child," "Unity in Diversity," "Harmonious Development," "The Law of Opposites," or eulogies of Froebel and the kindergarten were given the sole right to a place on the program. At these gatherings one listened to inspiring addresses on themes with which all were familiar and upon which all unanimously agreed. This was all well and good in the early history of the kindergarten, when strength and encouragement were needed in order to maintain faith in Froebelian thought rather than suggestions along the line of modifications and growth.

Later came those epoch-making conventions when some bold critic, outside the ranks, dared to voice his doubts as to the advisability of keeping intact the traditions of the kindergarten as the best means of meeting present needs and future conditions of growth. Needless to say, there were no words of approval or encouraging applause, but rather an ominous silence, combined with a frostiness in the atmosphere which made the critic feel that he had come ill-clad for so chilling a temperature.

Fresher still in the memory are the more recent meetings of the International Kindergarten Union and Committee of Nineteen, where all the points at issue were freely and frankly discussed by representatives from both wings of the kindergarten, and a most

respectful hearing given opposing opinions, whether voiced by one of the kindergarten profession or by critics from other departments of education. Since this time kindergartners have been learning not only to agree to disagree, but to value criticism from those holding opposing views.

The printed programs of the International Kindergarten Union and all its branches show a goodly array of noted specialists in philosophy, psychology, sociology, art, literature, and music. These experts are not only invited, but urged to give their criticism of kindergarten methods in the light of their specialty, and these criticisms, together with the opposing views held among kindergartners, are shaking the earlier pedagogical egotism to the foundation, and slowly, but surely, kindergartners everywhere are learning to welcome respectful criticism and to value truth from any source.

III. THE FUNDAMENTAL THEORETICAL POINTS AT ISSUE

Many of the theoretical points at issue in the kindergarten profession are mere differences in interpretation, and hence are of greater importance to kindergartners than to educators in general. However, as the kindergarten is being incorporated in the public-school systems in all our large cities, these differences in both theory and practice are becoming increasingly important to all the superintendents, principals, and teachers of our common schools.

While there are many vital phases of philosophy which all kindergartners hold in a common faith and love, there are points upon which the two schools of kindergarten vary fundamentally, even though the uninitiated can discover no significant differences. Some of the most marked differences are here, as elsewhere, due to temperamental causes, repeating the universal tendency to opposing views in philosophy, theology, literature, music, and art. In fact, temperament and training will easily account for the different valuations and emphases which kindergartners place upon the following aspects of thought: a more or less static *vs.* a dynamic interpretation of the German philosophy of the early nineteenth century; the rationalistic and introspective *vs.* the genetic and social psychology and child-study; the standards of civilization *vs.* the standards of the child's impulses, interests, and stages of development; the importance of stirring in the child's heart and mind symbolic premonitions and spiritual ideals *vs.* the importance of providing

the social situations which lead to the formation of unconscious habits of social worth; the poet *vs.* the scientific; the esthetic *vs.* the industrial; the diffluent, mystic, and remote imagination *vs.* the sensorial, plastic, and practical imagination; Froebelian authority in theory and practice *vs.* experiment and research for truth from other sources, or better methods of applying Froebel's principles.

Attention is again called to the fact that these are mere differences of *emphasis* and *accent,* as no individual or school of kindergartners would eliminate either antithesis. However, all are guilty of emphasizing one phase of truth at the cost of its apparent opposite, and the much-talked-of "mediation of opposites" and "harmonious development" are sacrificed to a dualistic interpretation of that which a deeper study would reveal as different aspects of an underlying unity.

Some of the theoretical differences among kindergartners have no outcome in alterations or modifications of practice, being merely variations in terminology or interpretation. For example, the same activity of the child may be under discussion, and one group will interpret it as an evidence of the child's "premonitions," "presentiments," and "foreshadowings" of mature truths of significance to the adult only, while the other refers to the same activity as a native impulse, interest, or as a rehearsal or reverberation of deeply rooted instincts dating back to a prehuman or savage ancestry.

This causes grave accusations to fly backward and forward, the radicals accusing the conservatives of imposing premature standards upon the child and interpreting his activities from the adult point of view; on the other hand, the conservatives deplore the tendency of evolutionary interpretation to arrest the child's development upon the plane of the brute and the savage. The conservatives rightly emphasize the need of interpreting the results of child-study in the light of their ideal fulfilment in the life of the adult and the standard achievements of civilization, and the progressive school readily accepts this, but feels that no activity is fully understood until it is seen in the perspective of its place in the evolutionary process, and interpreted in the light of its origin as well as its spiritual destiny.

While both conservatives and radicals have their psychological creeds, the former tend to accept the rationalistic and introspective psychology which is felt to be more in accord with what may be

designated as Froebel's philosophy; the radicals tend to accept as a working basis the genetic and social psychology of the present day. This readily explains the emphatic differences of opinion upon the following points in psychology and child-study.

1. The relation of instincts and impulses to the higher capacities and powers.

2. The relation of desire to effort, or interest to will.

3. The relation of sense-perception to imagination and expression.

4. The relation of imitation to originality and invention.

5. The relation of sense-perception and experience to the formation of the concept.

6. The dawn and evolution of the analytical powers.

7. The dawn and evolution of the ability for abstract thinking.

8. The dawn and evolution of the esthetic sense.

9. The psychological resemblances and differences between work and play.

10. The relation of activity to knowledge, or expression in relation to the rise and formation of the image and idea.

The position of both conservatives and radicals upon the foregoing points is so decided as to give rise to the marked differences in practice, which in turn gave rise to the necessity for a reactionary movement in kindergarten circles. These opposing views are having a most salutary influence upon each movement, and at present we cannot afford to dispense with the views or methods of either group.

Wholesale conversion would be most disastrous, for out of these opposing views will be sifted the safest and best held by each, which will give rise to a more balanced kindergarten system in the future, one that has gleaned much from both the faults and virtues for which each stands. Aaron's rod has put forth leaves. If such a wholesome state of affairs has come about within kindergarten ranks, it is a prophecy of great promise for the regenerated kindergarten of the future.

IV. THE POINT OF DIFFERENCE IN PRACTICE BETWEEN THE CONSERVATIVE AND REACTIONARY MOVEMENTS

The points of difference in practice between the conservative and reactionary movements as exemplified in—

(*a*) Programs.
(*b*) Gifts.
(*c*) Occupations.
(*d*) Art.
(*e*) Plays and games.
(*f*) Literature.
(*g*) Music.

It demands keen discrimination from a visitor who is not familiar with modern educational theory and the technique of the kindergarten to draw any distinctions of significance between the work of a conservative and a progressive kindergarten. In fact, to the ordinary observer the children seem equally happy, industrious, orderly, and healthy, and such a guest is likely to conclude that our heated discussions are a case of "much ado about nothing." On the other hand, a visitor with a fair knowledge of modern educational theory and the technique of the kindergarten will at once detect a difference in the conception of discipline and a marked difference in the uses of the gifts, occupations, and games.

(*a*) *Program.*—As it has seemed almost ridiculous to refer to a course of study for the tiny children in the kindergarten, the word "program" has been substituted for the more formal term.

Leaders in the conservative movement of the kindergarten have mapped out a program which was formerly called the "Uniform Program." This has been in use for years in many of the kindergartens in our large cities. It represents most careful study and thought in all its minute details, and has the distinct advantage of having been planned originally by a kindergartner of wide learning, scholarship, and experience. It was then submitted to the judgment of practical workers of less experience, until, as it stands today, the program is supposed to have been filtered through many minds and represents the "collective mind" of a large number of supervisors and training teachers "in close touch from the theoretical point of view."

This "Uniform Program" is finished in detail and ready for use in the kindergartens of all cities for all children of all classes. The subject-matter of this program consists in what are called "pattern experiences" or "typical activities" which are drawn from Froebel's *Mother Play Book*. Though this was undoubtedly an epoch-making

book, many of the progressive kindergartners feel that it is most suggestive when studied in the light of its period and natural setting; that is, as a book of plays and games written for mothers and children living in the peasant villages of Germany more than a half-century ago.

This program is arranged to meet the needs of a sort of "universal child-mind," and its adherents are strong in their denunciation of any program that emphasizes the need of adaptation to the social situations, in which particular groups of children "live and move and have their being."

When Mr. Courthope Bowen, of England, suggested that only the principles of the *Mother Play Book* should be followed, and that little children living in England or America should have plays and games reflecting their own environment just as the Mother Play reflected the surroundings of German children, he was met by this argument from the kindergarten: "In opposition to this view I hold that Froebel's games dramatize ideal experiences which *all* children may and ought to have, and that consequently they should be played by children of *all* nations and *all* conditions of life." [1]

While the radicals would not accept the particular substitutes which Mr. Bowen suggests, they do feel that the principle of adaptation is a valuable one.

This carefully systematized program certainly has many points of excellence when used as a basis for selection or suggestion; but when a supervisor in one of our large cities, where the Uniform Program is in use told us that she could look at her watch at any moment and know exactly what was being done in every kindergarten under her supervision, one can but feel that the individuality of the kindergartners carrying out such uniform details, and the best interests of the children of different experiences and capacities, must be unduly sacrificed to such a pattern system, no matter how good it may be in the abstract. Even such minute details as to what questions are to be asked, what illustrations chosen, and not only what gifts or occupations are to be used, but also what moves are to be made with them and in what order of sequence, are prescribed and prearranged. No primary or elementary course of study in existence leaves so little to the initiative and judgment of the teacher.

The new school of kindergartners feels that the tendency of such

[1] *Symbolic Education*, p. 169. Susan E. Blow.

a program is to blight the individuality of the kindergartner, to kill the incentive to study and plan her own programs, and to tempt her to put all children through the same set régime whether they live in the crowded tenement or suburban village, at the sea-shore or in the inland town.

On the other hand, in all justice it must be accorded that some of the radicals must plead guilty to too great laxity in leaving programs to the limited experience and judgment of immature kindergartners. However, they do believe that, if the object of education is to help the child to an intelligent participation in the most significant experiences of the situations in which he lives, this tendency to accept *any* one program for all children of all experiences, capacities, and environments violates the most fundamental demands of modern educational theory and practice.

While it is but fair to the able authors of this program to state what their plea is and that it should be used suggestively rather than literally, the practical result with the kindergartner has often been the formation of habits of undue dependence upon the plan of such well-known authorities, and the feeling that its wholesale acceptance is safer than any variation which her lesser experience suggests. The outcome with kindergartners, who form the habit of dependence upon any fixed program during the years of professional growth, appears to result in an unquestioning acceptance of the infallibility of the same, in proportion to the number of years it has been relied upon. In many instances there is also noted a singular blindness to the virtues of any other programs which vary fundamentally from the one adopted.

While it must be freely acknowledged that such conditions result from an abuse of this program, which is contrary to the spirit of its author, it is equally true that such a detailed course of study given by *any* able authority tends to overpower the judgment of immature teachers and cause them to fall back upon any ready-made program which relieves them of individual responsibility, saves time, study, and individual planning from day to day.

(*b*) *Gifts.*—It is taken for granted that the readers of this article are familiar with the fact that Froebel's so-called "Gifts and Occupations" form a series of educational materials based upon the principles of analysis and synthesis. The gifts begin with the ball or sphere analyzing through solids, surface, and lines to

the point; while the occupations reverse this order embodying the synthesis of form from point, through lines and surfaces, back to solids. The traditional procedure has been to cling to this logical circle of materials and so use them that "the child will gradually grow into a consciousness of their geometric relations," types, and evolution.

The progressive school believes that little children cannot appreciate the geometric evolution of such a logically planned series of objects, and in breaking through the charmed circle of geometric logic, this school tends to select or emphasize only those gifts in the Froebelian series which they feel are suited to meet the experimental and constructive needs of childhood. This results in an emphasis upon those gifts which are blocks, rather than upon that portion of the material which grows smaller and more abstract as the series is analyzed through surfaces and lines to the point.

The different uses of the gifts and occupations, now under discussion in the kindergarten, seem to correspond to the different attitudes held toward the use of the alphabet and the technique of reading and writing in the primary grades. The question of paramount importance is, Shall the gifts and occupations be used to bring to consciousness the qualities and geometric relations existing in and between themselves, or, shall they be used for experiment, expression, and construction first, leaving to a much later consciousness the fact that they are made of spheres, cubes, cylinders, corners, edges, squares, surfaces, angles, points, etc.?

In the Uniform Program used largely among conservative kindergartners the gifts and occupations do not seem to be emphasized as a means of expression and representation. On the contrary, they seem to be used as the A.B.C. of form and geometric evolution.

Fortunately the day has dawned when kindergartners bound by the closest ties of friendship can disagree frankly, yet for fear unfairness may have unconsciously crept into the above statements the following quotations from some of the most prominent conservative leaders are given.

Through using the gifts in productive *exercises* the child is incited to observe the elementary qualities of all material objects. The qualities form the alphabet of nature, and Froebel has so organized his gifts that each letter in the alphabet shall be almost unconsciously learned.[2]

[2] *Report of the I. K. U.*, 1900, p. 51. Susan E. Blow.

Again we have from one of the more recent writers on the use of Froebel's gifts and occupations the following:

As the kindergarten gifts are designed to serve as an alphabet of form, by whose use the child may learn to read all material objects, it follows that they must form an organically connected sequence moving in logical order.[3]

The radicals value Froebel's gifts because they offer opportunities for—

(1) Play,

(2) Free investigation and experimentation,

(3) The development of the constructive instinct,

(4) Expression and representation,

and do not emphasize, *save in the most incidental way*, the use of the gifts as—

(1) A means of bringing to consciousness the geometric or symbolic qualities and relationships inherent in the gifts themselves;

(2) As a means of helping children to form the habit of classifying all the objects in their environment under some type form, color, or activity;

(3) As a means of abstracting from their natural setting the qualities of form, number, color, motion, direction, and position, which naturally come to consciousness at a later stage, and then through first-hand contact with the natural objects in which they inhere.

The radicals believe the gifts should be used as a means to an end; that is, they believe that the child is naturally trying to express, through the medium of the gifts and occupations, the images and ideas which come to him in his social and natural environment. The kindergartner accordingly fulfils her highest function when she helps the child to do, with educational value, that which he is seeking to do alone; in other words, that through the child's own impulse to express and represent his social environment through the medium of play she brings to his consciousness the industrial and esthetic and ethical values bound up in his own most significant experiences.

We have Froebelian authority for the truth that what the child imitates he is trying to understand, and radicals gladly accept this statement, provided they are not asked to believe that it is the formal

[3] *Froebel's Gifts*, p. 8. Nora Smith and Kate Douglas Wiggin.

aspect of objects and results that the child is trying to understand through imitation.

All the experiments of Barnes and Binet go to prove that the abstract attributes, such as form, color, etc., play a very small part in the child's consciousness at this age; on the contrary, investigation points to the fact that it seems to be function, purpose, use, or service which the child is trying to understand; that is, he is trying to establish some kind of a rational relationship between objects and personal and social needs.

While the cognizance of attributes of objects enters unconsciously into the apperceptive process of the little child's thinking, it seems legitimately to remain below the plane of consciousness. In fact, the mental activities by which the mind is constantly observing, discriminating, and classifying objects in the light of their attributes may be compared to the automatic and reflex activities of the body, in that, while fundamentally important, the degree to which their working remains below the plane of consciousness is an indication of their normal activity and the good health of the subject.

Binet sums up the result of his investigations as to what elements enter into a child's thoughts about and definitions of things in these words:

> It is almost never a question of the visible aspect of the objects. The responses bear almost entirely upon the uses of the objects. Bread is for eating; a chair is for sitting upon; a table is for putting lamps or books upon; . . . . they are utilitarian above everything; . . . . the child is naturally attentive to the uses of objects.[4]

There is strong evidence pointing toward the fact that Froebel used his own materials in this more playful, natural, and childlike way as long as he came in direct daily contact with the children themselves, and that the more formal methods crept into his procedure as he devoted more of his time to the training of the adult. However true this may be, Froebel certainly was impressed with the little child's very personal interests in the use or function of the object; for he said:

> The child, though as yet very dimly, connects with the something the perception, the idea of a purpose for this something; for example, he connects with a chair or bench the idea that someone can sit upon it.[5]

[4] "Perceptions d'enfants," *Revue philosophique*, December, 1890.

[5] *Froebel's Pedagogics of the Kindergarten*, p. 128.

The studies of Barnes [6] and O'Shea [7] emphasize the same point; the returns indicating an overwhelming interest in and appreciation of utility as compared with the more formal aspects of form, color, material, etc.

There doubtless may be justification for a *limited* use of the gifts and occupations in the construction of "forms of knowledge and beauty" from the fact that there are some *slight* evidences of the child's interest in abstract knowledge and his enjoyment in the construction or possession of objects for purely esthetic reasons.

However, if the results of these investigations are trustworthy, it seems that they should lead to an increasing valuation of the gifts and occupations for the construction of "life forms" and a decided limitation of the traditional use of these materials in the constructions of forms of "knowledge" and "beauty" as mere ends in themselves.

The radicals believe that the mental habit of observing all objects in the light of their form, color, position, etc., tends to mental perversion and arrested development. They believe that all these points should be subordinated to function and should be brought to the child's consciousness only in so far as they serve function and lead to truer expression. In other words, the gifts should be used mainly for experimentation, or as a means of social *representation, interpretation,* and *clarification,* through the medium of play. Just as the new education has struggled to subordinate the technique of reading and writing as an end, and make the mastery of them a means of expression and communication of thought and social values, so the radicals would deal with the gifts.

Used in this way the gifts are a means of relating the child to the life around him. The kindergartner, presenting the ideal of social service, throws the children upon their own resources in creating forms that embody that function. Utility is considered very materialistic by the conservatives, but if use is interpreted in the light of social service, it embodies one of the highest ideals which the child's mind can grasp, and one which makes him a more intelligent and helpful member of society.

A prominent kindergartner criticizes this use of the gifts as a means of reproducing and interpreting social life in these words,

[6] *Studies in Education,* Vol. I, No. VI.

[7] *Dynamic Factors in Education,* p. 72.

which will illustrate the typical differences in the use of the gifts in the two schools of kindergarten: "It must be remembered that the building gifts are not intended so much to illustrate the real or vicarious experiences of life as to acquaint the mind with the general properties of matter." [8] In answer to this statement the radicals would reply that it is not only unnatural, but a distinct mental perversion to cultivate in little children this habit of thinking of objects primarily in terms of form. Such methods easily lead to arrested development on this plane, for, as Dr. Harris maintains, "arrested development on the stage of number or color of any other *abstract* phase of things is injurious to the mind. . . . . *The kindergarten has its dangers of arrested development.*" [9]

On the other hand, to help a child deepen his natural tendency to approach and interpret objects from the standpoint of their social purpose, or significance, at once establishes a rational association and relationship with his environment. It enables the child to play an intelligent part in life, helps him to gain control over his surroundings and to form sensible habits of behavior when confronted with social problems.

The important things for a little child to realize in the presence of objects is not that they are circular or triangular, but that they have social utility (or meaning) the significance of which he must gain if he is to "orientate himself intelligently in social situations."

The important thing for a child in the presence of a rolling-pin, a wheel, or a hoop, is not that he shall classify them under certain geometric types, but rather, if he thinks of form at all, that he may through the use of the objects be led to see that being circular makes certain functions or activities possible. The following story well illustrates what radicals consider the legitimate outcome of these formal methods with the gifts in developing in children the mental habit of thinking of objects primarily in terms of form.

A small boy of five came into the kindergarten one morning with radiant face and sparkling eyes, crying out in joyful tones: "I have something for you! It's hard and long and has four edges and two ends!" The precious object was held behind him, while he danced around in fond anticipation of the pleasure he was about to give his teacher, of whom he was very fond. "What can it be?" she answered, entering sympathetically into his pleasure.

[8] *The Kindergarten Building Gifts*, p. 83. Elizabeth Harrison.

[9] *Kindergarten Psychology*, p. 6.

"Do show it to me." In proud triumph the hand which held the treasure was extended, and in the palm lay a burnt match. And the kindergartner accepted it as a gift of value, for had it not helped to unlock the great world of form and its elements—faces, corners, and edges?[10]

If only that knowledge is of most worth which arises in social experiences and in turn interprets and enables one to gain control over them, this accumulation of formal knowledge seems to be purely extraneous, in no way furthering the little child's intelligent participation in the life around him.

It is interesting to know that criticisms of the formal use of Froebel's gifts are not confined to present-day critics alone. We are told that at the Rudolstadt convention, when Froebel himself had shown the German teachers of that day what could be done with his gifts in mathematical forms, the following criticism was made by an auditor:

I hold that it is an injury to child-nature to lead too early to observing and discriminating the geometric forms, as illustrated in the cubes, oblongs, etc. The Froebel gifts, as they are supposed to be presented to the child, suggest too strongly the dissecting-knife method. Froebel will not stubbornly hold to his method of presenting the same, if we can show him a more normal and natural application of his kindergarten idea.[11]

(*c*) *Occupations.*—If the activities which the kindergarten and primary school hold in common could be designated by similar terms, it might serve to bring to the consciousness of both the kindergarten and the primary teacher the unnecessary break between these two grades of education. The kindergarten refers to handwork or industrial activity as "occupations"—a term which frequently passes out of use in the industrial activities of the grades.

The traditional occupations of the kindergarten begin with the geometric point exemplified in a sequence of exercises in "pricking" or perforating a series of points into lines; this is followed by exercises in lines and surfaces, culminating in the cardboard and clay-modeling which embody the solid. The occupations thus reverse the order of analysis in the gifts and, by the principle of synthesis, complete the other half of the circle of unified material. Many new-school kindergartners believe that these Froebelian occu-

[10] *Kindergarten Building Gifts*, p. 52. Elizabeth Harrison.

[11] *Girlhood Days at Keilhau.*

pations are logically planned exercises in geometric evolution, and *as such* do not appeal to the interest and self-activity of the child at the kindergarten period. A number of the exercises in sewing and weaving, etc., are fine and small, demanding the use of the accessory muscles of the eye and hand which are so easily fatigued at the kindergarten age, thus tending toward abnormal exhaustion and nerve-strain.

They also believe that these sequences in sewing, weaving, folding, etc., are too abstract both as to process and product and that, as sequences, they meet no need in the social experience of the child. The activities of sewing, weaving, folding, etc., are interesting to the child and fundamental industries in race-life, but when confined to the production of endless geometric exercises in the creation of products which serve no purpose in the child's life, they fail to fulfil their most educative end. Some of the new-school kindergartners have retained these historic race activities, substituting larger, and more durable materials for the more perishable ones used in the traditional occupations.

These new occupations have been called constructive because they were planned to meet the constructive instinct of childhood. As representations they are more real, and being constructed in three dimensions they offer quite a contrast to the flat picture occupations of the orthodox type. For example, a real kite is constructed instead of a geometric form, vaguely and often poorly representing a kite; a doll hat or doll rug is woven instead of a series of paper mats to be pasted in a book, or hung upon the wall.

In fact, some radicals go so far as to say that the production by the child of his own toys might serve as an excellent transition from the attitude of play to that of work, in that, while toys represent a conscious need of childhood, their production demands a subordination of the process to the accomplishment of a product and application to an end, which is quite characteristic of the attitude of work. Such products of child-activity are necessarily crude, and if judged by adult standards of beauty they will be weighed and found wanting. However, they call forth the child's interest and determination—his self-activity—as the weaving and folding of geometric sequences as such never can.

Such occupations as these easily develop into the more finished and esthetic occupations of the modern primary school. In fact, if

an exhibit of the traditional occupations of the kindergarten and those from a progressive primary school are placed side by side, one cannot but be impressed with the small, fine, abstract, and unchildlike processes and products of the kindergarten occupations. There is in truth no more damaging evidence against the kindergarten occupations of the orthodox type than such an exhibit furnishes.

As it seems best to give the opponents' point of view in their own language, the following quotations from one of their most recent guide-books is in order:

> Thus the child has been guided in a logical manner from the solid body through its divisions, and through its embodied plane, line and point, in matter and by matter, to the borders of the abstract; and if the work has been properly done, and if the other instrumentalities of the kindergarten have been wisely managed, the child is ready to build the conventional studies of the school upon the foundation of his objective knowledge.[12]

This last statement the new-school kindergartners would decline to accept, as they feel that no good modern course of study for primary education could be based upon, or normally grow out of, any such mature, abstract, formal knowledge.

(*d*) *Art.*—In years past the fundamental differences in kindergartens were largely focused upon the use of the gifts and occupations; whereas in the last few years they seem to center more and more around the art activities. The effects of the mechanical and formal school of drawing planned by Froebel have been so strongly criticized by artists that kindergartners of all creeds and faiths have practically substituted the more spontaneous free-hand drawing.

A large proportion of the series of occupations in the kindergartens of an earlier day involved the production of unending sequences of symmetrical figures called "beauty forms." The gifts were also used to this end, and the consequence has been an undue emphasis upon the use of these crude, symmetrical figures in borders and designs. For years the art-training of the children in the kindergarten was largely limited to these forms, but again the artists have dared to criticise the theory of Froebelian art and have denounced the effects of these beauty forms on later art expression. While the artists were criticising the crude and inartistic effects in these forms, the psychologists were equally decided in the denunci-

[12] *Kindergarten Occupations*, p. 15. Smith and Wiggin.

ation of their value in meeting the needs of the child at the kindergarten period.

The new-school kindergarten has reacted against the undue proportion of "beauty" and "knowledge" forms compared with the more natural impulse of the child to construct life-forms, which reproduce the familiar objects in his social environment.

While the kindergarten child's esthetic sense is most worthy of deep consideration, it is so closely bound up with the instincts of construction, representation, and personal decoration as to warrant little in the way of a direct appeal. Notwithstanding this fact, with the recent influx of art work into the kindergarten a conscious appeal is being made to the mature principles of composition involving relations of space, line, color, tone, and hue.

Caroline Frear Burk sums up the results of her study of the child's natural impulses toward the production of "life," "knowledge," and "beauty" forms in exceedingly sane language. She says:

> It is evident that the kindergarten child's spontaneous activity and interest are toward natural and life forms rather than toward forms of beauty and geometric design, although clearly there are some traces of the art instinct in this latter line. . . . . Interest in concrete representation far outweighs that in abstract form and design arrangement.[13]

Perhaps a goodly proportion of radical kindergartners would agree with Eby, who, after his study of the esthetic sense of the kindergarten child, says:

> The esthetic awakenings of children begin to make themselves active in a remarkable way, during the kindergarten age. These interests center in drawing, painting, music, looking at pictures, clay-modeling, paper-cutting, and many other simple forms of childish activity, which are set off more or less by the imitative impulse. The chief thing noticeable in all these well-known performances is that they are as yet rather a means of expressing thought on the part of the individual and not directly an attempt to produce the beautiful.[14]

Sully also is quite impressed with the lack of esthetic intent and motive in the productions of earlier childhood.

The present tendency with both wings of the kindergarten is to make an appeal to a mature consciousness of the beauty in both

[13] *A Study of the Kindergarten Problem.*

[14] "The Reconstruction of the Kindergarten," *Pedagogical Seminary*, Vol. VII, July, 1900.

nature and art composition which is characteristic of a later stage of development than the kindergarten. As a result you find tiny children in the kindergartens painting landscapes long before any such harmonized conception of beauty can possibly mature in the child-mind. From the external point of view these results are beautiful, but when measured by the standards of true self-expression they seem to be, largely, extraneous devices, and impositions of a mature sense of beauty in an art form far beyond the conception of the kindergarten child.

The method of securing these esthetic results is very deceptive to the teacher, as the child's love of washing in color, in masses, is so strong that he will fall in with any scheme which makes this possible, whether the form of expression to which he is led is a realization of any imagery of his own or not.

In addition to this mature landscape work there is a tendency, through the use of borders and designs, to bring to consciousness prematurely the problems of space, line, color, etc., involving a sense and appreciation of art relationship which belong to a later stage of development. It is undoubtedly true that even the kindergarten children need careful guidance, suggestion, and tactful criticism if we wish to prevent the tendency to arrested development on the plane of the crude spontaneous expressions of child-life at this period. But in all this carefully directed art work, which is certainly on the increase in *all* kindergartens, we need to be reminded of the fundamental importance of spontaneity *at this age*. There is a grave danger of blighting rather than guiding that spontaneity which is after all the pearl of great price, especially at this stage of the child's development.

The tendency to emphasize art-training at the cost of industrial training, which seems equally valuable, is voiced by one group of kindergartners in these words:

> We deplore the tendency to make industrial aims paramount in education, and believe that the accent of the kindergarten should be placed upon the beautiful rather than the useful, upon the embryo artist rather than upon the embryo artisan.

The most trustworthy investigations in child-study seem to indicate the fact that the characteristics of the artist and artisan are merged in early life. They have not separated into a consciousness of the useful as something distinct from the beautiful. Guided by

this idea, the best effort in the art education of the elementary school is toward an attempt to unite the two, so that one may not be accented at the cost of the other.

On the other hand, granting for the time being that the sense of use and beauty have separated into a distinct consciousness at the kindergarten period, these questions arise: Why should one be emphasized at the cost of the other? Is not the ideal that of the embryo artist-artisan rather than that of the embryo artist or artisan?

(*e*) *Plays and Games.*—In the matter of plays and games kindergartners of both persuasions are rapidly approaching a common point of view. Until recently there was a marked division and varied opinions regarding the symbolic value of games: the conservatives emphasized only those games which were supposed to have symbolic values; the radicals went to the opposite extreme in valuing games largely from the standpoint of health, physical training, and hygiene. The problem of symbolism in games is on the decline, while the importance of the consideration of health is decidedly on the increase with *all* kindergartners.

Little has been said in this article with respect to the symbolic significance of the gifts, songs, and games, as the symbolic problems of the kindergarten seem to solve themselves in proportion to the degree in which they are ignored. While symbolism was the most significant cause of division among kindergartners originally, saner statements are now on the increase every day, and a few years of silence will do much to reduce the tendency to emphasize the statements of an earlier period regarding the child's "premonition," "presentiments," and "foreshadowings" of mature truths far beyond his grasp.

The degree to which children dramatize nature is under discussion in the kindergarten, and there is a growing conviction that dramatizations of moon-beams, nodding flowers, etc., are not so natural and wholesome as the dramatization of the activities of human beings in vital social relationships.

The problem of introducing formulated games into the kindergarten is also under investigation, as observations indicate that little children do not play formulated games to any great extent. The same observations suggest, too, the need of playing in smaller groups than any kindergartens at present have been able to arrange.

(*f*) *Literature;* (*g*) *Music.*—The kindergartners of all schools come nearer reaching a uniform conviction regarding music and stories than upon any other phase of the kindergarten program. While there is the old discussion with reference to the imposition of premature spiritual ideals in stories, and mature standards in music before the child can appreciate either, there is a healthy reaction in both wings of the kindergarten, and careful consideration is also being given the equally important danger of introducing cheap forms of music, literature, and art under the plea of simplicity.

THE PRESENT AND FUTURE NEEDS OF THE KINDERGARTEN

The points which follow seem to the author to be the imperative needs of the kindergarten in the future. They are given with the sincere desire that they may help to unify diverse opinions sufficiently to make it possible for kindergartners, with opposing views, to work together in happier relations in the future.

It is also equally important to point out any of the difficulties in adjustment which cause the break in the child's growth as he passes from the kindergarten into the primary grade.

(*a*) Kindergarten training-schools should be affiliated with normal schools or universities where kindergarten students could be trained with teachers in all grades of education, sharing with them the general courses in philosophy, psychology, methodology, art, science, etc., taught by specialists, who have in mind the educational problem in its entirety.

While this is a vital need, there should also be a kindergarten training-teacher who helps the kindergarten students to see the relation of these studies to the particular problem of the kindergarten; they should be specifically applied to the kindergarten problem, after a survey of the broader field of the general educational situation presented in classes with students preparing for all other grades of education.

It is true that kindergarten training-schools have been separate and apart from education as a whole. The students were often taught Froebel, and Froebel only—his philosophy, his gifts, occupations, and games. The psychology and philosophy were studied in Froebel's Mother Play, etc., and students had no standards of comparison. They did not see Froebel in perspective, and know his place in the history of education; consequently they looked upon

him as the sole prophet of truth, slavishly following his letter rather than his spirit, and felt that any variation was heresy.

(*b*) The second need of the kindergarten movement is the co-operation of scholarly men, for it has been too exclusively a woman's movement. In the past the work was largely propagated and supported by boards of women, the instructors in the training-schools, the supervisors were women, and of course the work with the children had to be in the hands of women.

The practical ways in which the co-operation of men is needed are these:

First: A sympathetic, unbiased study of Froebel by professors of philosophy, psychology, and education. Too often we have Froebel dismissed with a few condescending paragraphs; we find him criticised unfairly, or, worse still, ignored entirely. Fortunately this attitude is already changing rapidly and the philosophy of Froebel is becoming the subject of fair, unbiased study by scholarly men, as well as women, who, in the light of the fact that they are not kindergartners, can more easily see Froebel impersonally, realizing his limitations as well as his genius.

Second: School superintendents and principals are needed who have studied Froebel. A large proportion of them at the present time know nothing of his real worth or equally real limitations, and consequently assume one of two attitudes; they either honestly state their ignorance regarding Froebel and the kindergarten, and leave the kindergartner to run things her own way, without the intelligent criticism given other teachers; or, thinking the whole kindergarten situation rather a farce, they criticise the idea unintelligently and ruthlessly. A school superintendent or principal who is capable of giving an intelligent helpful criticism to kindergartners under his supervision is rare.

(*c*) The next need of the kindergarten is intelligent co-operation with, and a more sympathetic relationship between, the kindergartner and the primary teacher. This can be brought about in two ways: (1) Every kindergartner should study primary methods and aims, so that she can work intelligently toward the primary grades, thus preventing a break in the child's development. (2) Every primary teacher should study something of the kindergarten, in order that she may know what to expect of the kindergarten child, and so be enabled to lead him on intelligently. In fact, the separate

training for kindergarten and primary teachers to the degree we have had it in the past should not exist. They ought to study much in common, and, in specializing, each should know, not only her own problems and methods, but those of the other. Until there exists this mutual insight and understanding we can neither expect intelligent co-operation between kindergarten and primary teachers, nor a bridging of the gulf between the kindergarten and the primary school.

(*d*) This last suggestion is given with some hesitation because one cannot be certain that the evils resulting might not be greater than the good which would follow. Nevertheless, it seems possible, provided supervisors could have good training in the theory and practice of both the kindergarten and primary grades, that a common supervisor could do much to unify the work of the two departments.

This would no doubt raise legitimate objections among kindergartners and primary teachers, unless the supervisor could be equally trained in the methods of both. It is true that, when this has been done in the past, if the supervisor has had training and experience in the primary alone, the kindergartens have been unduly sacrificed to the demands of the school. On the other hand, when the supervisor has had kindergarten training and experience without the same in primary work, too many methods of the kindergarten have crept into the grades, arresting the growth of the school children on the plane of play.

I believe that the kindergarten is the foundation of education, that it is no fad, that it has come into education to stay; but in order to place it in the right relation to the school system we must have the intelligent co-operation of superintendents, school principals, supervisors, primary teachers, and kindergartners. The kindergarten is in danger of becoming an excrescence instead of an organic part of the public-school system, and it will take the willing co-operation of all to make the bond between the kindergarten and school a truly organic one.

It is acknowledged that the kindergarten has suffered from its isolated position in education and developed many faults, but it has also carried a message of humanity into the field of education. Again, it is acknowledged that kindergartners have often been sentimental, but they have brought a motherly love into the school;

they may have resented criticism of their system of education, but they can never be charged with indifference; they may have been overenthusiastic, but they have ever been devoted to their work; they may be divided among themselves into different schools with many different aims and methods, but there is one point upon which all kindergarten schools stand forever united, and that is an intense devotion to the child and a loyal consecration to what each considers the child's highest good.

The motherly devotion and care bestowed upon childhood, irrespective of caste and position, by every kindergartner, no matter what school she represents, is something beyond price, and, as Davidson has said, any criticisms upon such work as this may be fair, but after all "they are only spots on the sun."

V

THE EVOLUTION OF THE KINDERGARTEN PROGRAM

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INTRODUCTION

The organization of a program, or course of study for any department of education presupposes a background, or foundation of principles which admit of universal application and adaptation. The kindergarten as a department of education has such a body of principles, and relates richly and harmoniously with the best prevailing systems of thought. Its philosophy is in harmony with the highest philosophic thinking. Its fundamental principle of organic unity—which is in keeping with the profoundest generalizations of scientific thought—is regulative of both its theory and practice. Its aims are in accord with its philosophy and principles, and reflect a world-view that is primarily spiritual and esthetic. Its psychology is genetic and dynamic. It recognizes evolution as the method by which the self progressively manifests itself and assimilates the nurture of a progressive experience to its own development. It accepts activity as the resident force that reveals the unitary life of the child, whose development depends upon two interrelated factors: first, the recognition of the child as a responsive agent capable of self-revelation and self-realization; second, the selection and arrangement of subject-matter or experience, educative materials, and activities as furnishing the situations or environment in which the growth and development of the agent takes place.

The kindergarten program records the efforts to synthesize into organic wholeness the philosophy, psychology, principles, aims, subject-matter, educative materials, activities, and methods of the system for the guidance of daily practice in the kindergarten. These efforts are characterized by limitations of knowledge and errors of judgment such as are found in the attempts that have been made to formulate courses of study for elementary grades of instruction. At best, the program represents the working hypothesis of the kinder-

garten proper, and is subject to criticism and reconstruction by the evolutionary method, as insight into the meaning of education is deepened by constant reflective thought, and clarified by conscientious practice. To formulate a program for the kindergarten based upon educational principles of universal validity and acceptance, the application of which shall minister to the essential needs of childhood; to enter the storehouse of human achievement and culture, and from its riches select and arrange suitable subject-matter for its development—constitutes a difficult and delicate task.

In the evolution of the kindergarten program—the movement of which can be traced from Friedrich Froebel, the founder of the kindergarten, to the present time—at least three conceptions of the subject are represented.

In the first conception may be seen an apotheosis of childhood. It accepts Froebel's major premise—that each human being in its unitary life is a child of Nature, a child of Man, a child of God. Only through self-activity can this threefold nature be revealed or realized; hence, the emphasis upon the child as the spiritually determining factor in the program. The relationships to nature and to man are co-ordinate factors the first of which demands a quantitative and qualitative key to unlock its mysteries—which is furnished by the gifts and occupations—while the second emphasizes human relationships through the experience content of daily life.

The second conception of the program accepts type aspects of experience as its determining factor. It regards the child as the bearer of a life in which are blended characteristics that are distinctly natural, human, and divine. It seems to regard the child as a concentration and conservation center; and seeks, through the selection and arrangement of subject-matter, to engraft upon the native stock of child-life, the scions of whatever is most "generic, historic, and characteristically human," making use of the gifts, occupations, and subject-matter in conformity to the fivefold aspects of human experience that represent the sciences and humanities.

The third conception of the program regards the child as its determining factor, not as an individual independent of experience—since in his corporate life he is a bearer of all experience—but as having a life endowed with "experience fulfilling" capacities. These endowments, through processes of realizations, reveal his heirship and indebtedness to a natural, human, and spiritual inheritance, and

at the same time vindicate his right to be called an individual, a person. This conception of the child as the center involves the presence in the program of the elements which give validity to his "experience fulfilling" capacities which are none other than the experiences of the life that now is and the experiences of race life. These experiences are the dual aspects of the subject-matter of the program, which, together with educative materials, are the means through which, in adjustment and adaptative processes, are realized both the individual and racial aims.

In the threefold movement that has developed the program as related to the kindergarten, we may discern a general position, or thesis, which regards child-life as the determining factor in the first; the antithesis of this position in the second—which regards subject-matter as the determining factor; while the third, regarding both as necessary factors, attempts to synthesize them into an organic whole. Divergent as these three conceptions are in many particulars, they are dominated alike by two constant factors: first, the immature human being, contributing energies and activities; and second, experiences as furnishing the situations in life to be interpreted in terms of truth and worth to and by the child. Each solution of the program thus far offered must be regarded as tentative, since the final issues of a course of study must wait, in large measure, upon the development of an epistemological interpretation of experience, to which the kindergarten shall contribute the insights gained in its attempt to interpret and meet the needs of childhood.

It is the purpose of this undertaking to present these three conceptions of the kindergarten program, stating their respective attitudes towards the child, the subject-matter, educative materials and methods, briefly indicating the implications and results of each point of view. The word "stating" is used by intention, since the subject is of such dimensions that the principles involved receive little more than statement; while the presuppositions and implications of the views presented, need extended explanations that are not warranted in this connection. Therefore, I can only hope to indicate the points of emphasis in the subject, fully appreciating the fact that an ideal solution of the course of study for the kindergarten, as the latest development of school, cannot thus early be accomplished, when the school proper still pursues its quest of an ideal curriculum. It is my purpose to indicate the directions in which thought and action

are moving in the kindergarten, with the hope that, although the general position assumed fails to meet approval, it may at least prepare the way for more general discussions of the office of the kindergarten in its relation to the child, and its articulation with the school system.

I

The First Conception of the Kindergarten Program is characterized by exceeding simplicity and informality, and on the side of subject-matter is marked by the absence of anything like a formulated, continuous scheme or plan. However, self-activity is accepted as the guiding principle of the kindergarten, and the activities of the children, in response to the conditions of environment and the seasonal changes of the year, furnish the point of departure for daily kindergarten procedure. Under this régime the educative materials —gifts and occupations—are used to foster self-activity in the children and to interpret the experiences of life as manifesting three typical groups of concepts; namely, concepts relative to human activities; concepts of number, form, position, and direction; concepts of symmetry, proportion, and beauty. The pendulum of method oscillates between the extremes of free play and dictation, with—strangely enough—the balance of emphasis being placed upon dictation and logical sequence in gift and occupation exercises.

It is probable that this first conception of kindergarten procedure dates back to Froebel's own time and practice, since one may search his writings in vain to find sanction for a set program—understanding the term to mean the sum total of prearranged experience that shall take place during a stated period. With Froebel, the activities of the children and the common experiences of daily life furnished the two dominant factors of kindergarten practice. Freedom and joyousness seem to have pervaded all his associations with children. There is no evidence that in his use of the educative materials with the children overemphasis was placed upon the elements of number, form, position, and direction; it is Froebel's *theory* of kindergarten materials that sanctions the embodiment of these elements in sequences of constructive building with the gifts, and "schools of work" with the occupations, that still burden the kindergarten—especially in its training-school aspects—with an amount of handwork involving great loss of time and waste of energy that might be conserved to more profitable uses.

In the inception of the kindergarten in this country the gifts and occupations afforded the line of least resistance in the system. They were tangible, concrete objects to be mastered by means of mathematical and geometric formulas, and, hence, were elaborated and extended almost indefinitely; while the philosophic and psychological aspects of the system presented great difficulties, and received but partial and inadequate interpretation, the attitude toward them being that of unquestioning acceptance, rather than that of enlightened understanding.

Whatever may have been the practices of Froebel and his immediate followers, much of the early kindergarten procedure in this country embodied more of the spirit of Rousseau than of Froebel. Following the *child* as the determining factor, partial understanding and unquestioning acceptance of Froebel's idea that education must be far more passive and following than prescriptive and categorical created a sentimental attitude toward the child, and resulted in an absence of discipline which subjected the kindergarten to criticism that was as unjust to the spirit of Froebel, as it was salutary for the development of the kindergarten; while the use of the gifts and occupations in logical mathematical progression, minimized the purpose they were supposed to accomplish; namely, the development of true self-activity in children.

It is safe to assume that practice according to the first conception of the program is practically obsolete. Its limitations and failures were due, primarily, to the establishment of a dualism that, on the one hand, interpreted the child and his experiences in terms of feeling and emotion, and, on the other, interpreted the gifts and occupations of the kindergarten in terms of knowledge. With all its errors it contained the dynamic elements of truth that eventually demanded a relatively new interpretation and embodiment of the Froebel system.

II

The Second Conception of the Program in its philosophic and psychological foundations presents many points in direct antithesis to the first conception which is dominated by intuition rather than insight. In the first, self-activity is the psychological principle, by means of which *the child reveals himself,* and, under guidance, adapts the experiences of daily life to his own developing needs. In the second, self-activity is the regulative principle, through the func-

tioning of which the *child can be adjusted* to the fivefold riches of human experience. The preservation and transmission of universal experience seems to be its primary aim, and the development and interpretation of individual experience its secondary purpose. This conception of the program is a more or less conscious attempt to present to children the quantitative and qualitative aspects of experience; that is, to present the rudiments of time and space relations representing the sciences, and the generic ideals of human experience as they are revealed in literature, art, and the great divisions of institutional life, representing the humanities. Thus it becomes the office of instruction and training in the kindergarten, through the selection and arrangement of subject-matter and educative materials, to bring the child under the organized stimuli of typical experiences, the light and truth of which, pouring their radiance through the "five windows of the soul," shall become constitutive and regulative of its development.

Under this régime there are exceedingly definite ideas concerning the organized agencies of the kindergarten, and the method of making them effective. The child is subject to two co-ordinate lines of stimuli: first, typical human experiences which present concepts of deep significance; second, the gifts and occupations which are considered as materials of intrinsic worth, each gift and occupation having its own peculiar principles and laws to be demonstrated through play exercises. Method, under this plan, provides for a drastic separation between the experience content of the program and its educative materials. The situations and interests involved in the former in no way consciously condition the play exercises with the latter.

The first of these two classes of stimuli presents the experience content of the program in a selection of Froebel's "Mother Plays" which fall into five distinct groups. These plays are logical, not in the sense of being a time series, but in their movement from relatively simple to relatively complex experiences. The first group presents rudimentary aspects of movement, process, and time; e. g., "The Weather Vane," "Grass Mowing," "Tick Tack." The second group presents experiences involving form, size, and number; e. g., "The Family," "The Finger Piano," "The Target." The remaining three groups present human dependencies and obligations; e. g., the "Trade" plays, the "Light" songs, and the "Knight" songs. All of

these are elaborated by means of related stories, pictures, songs, and games.

The gifts and occupations constitute the second appeal to the child's activity. Exercises with these materials fall into three distinct groups; namely, exercises that emphasize human relationships, exercises that emphasize movement, change, number, form, position, and direction; and exercises that illustrate symmetry, ballance, and proportion. Logical sequence is the regulative principle in the gifts and occupations, by means of which the formal ideas embodied in the series unfold in systematic order, moving from simple to relatively complex and elaborate ideas of form, size, number, position, and direction, all of which are clothed in alluring devices that they may be made interesting to children.

The method of using the gifts and occupations is primarily that of free play and suggestion—the method of discovery and investigation based upon the idea of "restricted freedom." The child becomes, as it were, a discoverer; his freedom is restricted by the kind and amount of material presented for his play; and his activity, in response to the presented object, results in the discovery of the idea next in order in the logical sequence of the material; e. g., in the sequence of the materials, it becomes necessary to develop the right angle, and to illustrate contrast in size by laying a series of right angles with sticks measuring from one to five inches in length. The child is first presented with two sticks, and by playing with them and laying them in different ways he discovers many different forms which are named; e. g., tent, hammer, umbrella, flag. In the last example the child is supposed to have discovered the right angle. From this point the exercise concentrates upon the idea "angle." The child is encouraged to lay the graduated series of five angles; other children are incited to do the same; these are again named; often they are grouped under the family idea—whose numbered unity is determined by five—and named "father angle, mother angle, brother, sister, and baby angle." "In kindergartens where the logical geometric sequence of the gifts is held inviolate, the children play through exercises that emphasize sphere, cube, cylinder, square and oblong. They count faces, corners, and edges, first on the gifts, and then on objects around them. They discover vertical, horizontal, and oblique lines, angles and triangles of every description, while prisms—square,

triangular, rhomboidal, trapezoidal, etc.,—are made to develop in logical progression; and the road to discovery is so hedged about with limitations and restrictions that no element of chance enters to prevent the prearranged-for achievements." [1] Song and play are the accompaniment of the gifts and occupation exercises, which leads one writer to say:

> Slowly and gently, by many repetitions, may be sung sweetly into the child's awakening mind the fundamental concepts by means of which all after organizations of form, color, position, direction, size, and number are based, as well as all essential movements in space.[2]

Thus, through the selection and arrangement of typical experiences from the "Mother Play" with their related songs, stories, and games, and through the gifts and occupations with their emphasis upon the rudiments of knowledge of form, and number, the child is given a "rational insight into the world of nature and the world of man."

It is undoubtedly true that sanctions for these theories and practices are found in Froebel's statements concerning the gifts and occupations with their emphasis on number, form, etc.[3] The use of typical experiences selected, from the "Mother Play" also finds sanction in the fact that the aim of the "Mother Play" is to present to mothers and teachers the philosophy of the system as it is reflected in concrete, isolated experiences of child-life; and also in the secondary purpose of the book which is to preserve to the child a too easily forgotten past. The fact that Froebel looked upon it as his highest achievement, and used it in his classes, gives to the practice an added sanction.

In attempting to summarize the second conception of the program, its primary characteristic arrests attention at the outset. Here, all is certainty. Here is a guiding principle, namely, the Universal determines and conditions the Individual. By this plan of action, childish experiences are dislodged, as it were, from their solidarity in the serial experience of life. The correlative experiences are selected from the "Mother Play," the selection being

[1] For fuller treatment of this subject, see my article "The Kindergarten Gifts," in *Teachers College Record*, November, 1904.

[2] *Kindergarten Building Gifts*, by Elizabeth Harrison, p. 6.

[3] See *Pedagogics of the Kindergarten*, chaps. 5, 7, 9, and others.

determined by the standards of the universal and necessary, and also by the standards of the truths and worths they embody. Their arrangement is logical with reference to their "relative simplicity and ease of acquisition" by the child. In other words, these universal truths and worths must be broken into fragments in order that they may be made prepotent in the unfolding life of the child through the functioning of his activities in adjustment processes of mimetic and repetitive character. The child is conducted *from* his immediate and unevaluated experience into the pre-existing and predetermined universal experience of the "Mother Play" which conditions the experience, particular or individual.

The element of certainty may again be noted in the necessary definiteness of its starting-points, that take some natural experience in the world at large, or some induced experience in the kindergarten, as the point of departure. Definiteness of goal, or aim to be realized, is found in the *significance of certain universal truths* embodied in the typical experience of a related "Mother Play." Songs, pictures, stories, and plays are used to enhance this universal significance. Each embodiment or setting of the idea is *a particular* to be apprehended as conditioned by the universal truth. The number of "Mother Plays" used during one year varies; but, great or small, their use according to this plan necessitates successive points of departure, and the establishment of successive goals to be achieved. The implication is that each achievement is a new determination involving a new point of departure, a new goal to be achieved, *ad finem*. But where is the guarantee that the goal has been achieved? Have these initiations and excitations been translated into any adequate system of purposes or transformed into working power for their realization? The inference is that they have not, since method in this plan maintains a separation between the experience content of the program and its educative materials, and thus shuts the child away from the most adequate means by which the experience can be "psychologized," i. e., "turned over and translated into the immediate and individual experiencing within which it has its origin and significance."[4]

Does not the rational and logical development of experience in this conception of the program, with its emphasis upon the universal significance of the *ideas* involved, articulate with the general intel-

[4] See *The Child and the Curriculum*, by Dr. John Dewey, p. 29.

lectual position of Herbart, rather than the general voluntaristic position which implies a more or less conscious recognition of the presence of an integrating, practical end for all activities?

The second characteristic of this conception of the program is noted in the dualism maintained between the foregoing experience content and the gifts and occupations; and also in the triple separation that is maintained within the latter series, in the so-called, life, beauty, and knowledge forms. The primary dualism has been touched upon in an earlier statement. It is by conscious intent that the experience content and the gifts and occupations are held as independent realities, the functional significance of which pertains to two distinct realms represented by humanity and nature. Method with the gifts and occupations is conditioned by the perceptual activities of the child and the structural aspects of the materials. In the play exercises with the gifts and occupations there is constant appeal made to perceptual consciousness by the presentation of additional materials and technical elements of universal import. The responsive energy of the child is conditioned by universal, independent energies of form, number, etc., which are imbedded in the logical sequence of materials. Constant handling of kindergarten materials that present these universal factors to perceptual consciousness is to the end that their cogencies may become constitutive and regulative of child-development. Both experience content and educative materials, in their respective isolations, are bearers of universal ideas that condition and determine the course of individual energies and must be made increasingly potent, as through successive differentiations and integrations the developing soul pursues its quest of freedom.

Over against such a plan of action, with its consciously arranged separations, are set the limitations of the child whose tendencies and reactions have psychological rather than logical determinants. The child seeks and finds unity within the circle of his own experience, or he can bridge the gaps that separate him from the relatively unknown experience, real or imaginary, at a single bound, caring naught for distance, nor feeling any need to traverse the seried steps that intervene between him and the object of his desire and activity. The implicit freedom to traverse the universe at will, gives to childhood its uniqueness, and shapes its first interrogation of experience in the question, What? Childhood has its golden

age of acceptance wherein all truth, beauty, and goodness are open before it, and needs neither adult logic nor adult interpretation for its fulfilment. It is the period of unconscious tuition, in which, through the unitary life of feeling, is laid the foundation for the development of the intellect and will.

In its second interrogation of experience, childhood asks the why of things. Having built a unitary world on the basis of its first interrogation, it seeks to transcend its own interpretation of that world by the question, Why? This indicates that feelings of meaning are shaping its unitary life into some system of purposes. Does not this question at this time demand answers in terms of [feelings of] meaning rather than in terms of knowledge? Is it not in thinking the child a miniature adult with all the capacities and capabilities of the adult written small that leads to the practice of separating knowledge into fragments for the child, and then assisting him to rebuild by accretion the temple of knowledge, by concentrating first on one fragment and then on another? The practice of morselizing experience according to the principle of "relative simplicity and ease of acquisition" is an attempt to meet the needs of child nature. These fragments of rudimentary knowledge may seem valuable from the adult standpoint, but can the average child of five years of age perceive or conceive their significance, or establish relations between them? Is it a "necessary characteristic of primary and elementary instruction that it must take the world of human learning in fragments, and fail to give its pupils an insight into the interrelations of things?" [5] Is it not the tacit acknowledgment of the inability of the child to perform relating activities that leads to the practice of clothing the—in itself—uninteresting fragment of knowledge in a garment of device? May not the teacher be laboring under the self-deception that the children are getting the kernel of truth, when in reality they are feeding only upon its husks? Is it not just this necessity of making interesting that which is in itself uninteresting, that has made the teacher, too often, a neophite in method and a master of device? And have we not here the primary conditions that result in overstimulation on the one hand, and stultifying inertia on the other?

Again, may not the practice of constantly appealing to perceptual consciousness, with its concomitant activities, tend to arrest

[5] *Psychologic Foundations of Education*, by William T. Harris, p. 335.

the child upon the plane that demands constantly increasing external stimuli?[6] The "passive impressibility" of childhood is not a condition to be cultivated, but rather to be eradicated by educative activities. Furthermore, may not the very perfection of the kindergarten materials that yield such facile results, leave the child—inured to such achievements—helpless and overwhelmed when less perfect and facile materials are put into his hands? In this connection, one may question whether the method that restricts freedom to the discovery of the formal ideas in the series and reproductive activities, and that seldom establishes aims to be consciously realized by means of these materials, furnishes adequate training; since it leads the child captive to knowledge that can give no rational account of itself to his consciousness. Having no real insight into the truths thus acquired, the child lives and acts a pallid and unreal part, since reason and understanding are necessarily lacking.

Within the series of gifts and occupations with their separate classes of exercises—those that emphasize life-forms, again beauty, and yet again knowledge forms—one may detect a survival of something akin to faculty psychology. To seek to develop these, then, as distinct, is to work by the methods of an obsolescent science. Beauty and knowledge as factors in human development took their rise *within the life-processes;* and unless the little child again finds them

[6] The following incident took place in New York City, with a group of nineteen medium-class children whose average age was, apparently, five and one-half years. The materials used in the exercise were the third and fourth gifts in combination. Noting, especially, the work of one well-developed boy, I counted fifty-eight modifications of the materials in the first three minutes of an exercise that lasted one-half hour. Throughout the entire period the stream of perceptual activity flowed unchecked and unevaluated through consciousness. The objects of activity were experienced, as they came and went, with no other purpose than to follow the teacher's suggestion, "see how many things you can make with your blocks." These activities continued throughout the entire period, being interrupted occasionally to name a form, but without interpretation of any kind. The work was individualistic in the extreme, the social spirit being entirely lacking. The modifications of the materials in this single period ran into thousands, and, so far as I could judge, left only a taste for amusement. No doubt the children "discovered the possibilities of their materials," but possibilities yoked to no higher service than perceptual control by motor activity alone is of doubtful value in a scheme of purposeful education. This observation could be multiplied by hundreds of similar character. In this class of exercises I find a tendency to habituate the mind's responses to the immediate objects of sense impression, which retards the development of higher possibilities.

there, he may seek them elsewhere in vain. The artistic elements of regularity, symmetry, and harmony must be the *outcome* of human situations and interests. To give them separate embodiment and expression, and expect appreciation would imply a degree of psychical development rarely attained by a child at kindergarten age.

Assuming, at the outset, that the child is a being to be adjusted to the typical aspects of life under a fivefold classification, progression may be made in systematic and logical order from simple to very complex situations in life; yet, however adequate these situations may seem from the adult standpoint, they fail in the presence of the psychogenetic problems of child-development, since a child's experience can never be deciphered by the mechanical categories of causality, time, and space, or by number, form, position, and direction; nor can the perfected charts of typical human experience take the place of personal excursions into the immediate fields of human interests that condition the child's life, nor can control over the former take the place of intelligent control over the latter.

Again, while this method of maintaining a conscious dualism between the experience content and the exercises with gifts and occupations, and also the separation within the latter series, is undoubtedly sanctioned by Froebel, is not the principle involved in direct opposition to his general monistic position? And in emphasizing this dualism both in the theory and practice of the kindergarten, is there not danger of perpetuating one of the primary inconsistencies of the Froebel system? An unbiased study of Froebel's general position reveals that as the child gets at human nature through human life, through a human medium; so "the child gets at nature through human life, through a human medium." [1]

And, finally, are these experiences such as will enable the child to enter upon his primary-school work, without encountering serious obstacles that call for an entire readjustment of thought and behavior? The habit of instantaneous response to situations in the kindergarten does not always merge happily into the consciously reflective response required in the first grade. From kindergartens where the habitude of realizing consciously conceived aims has received only minimum development, the child passes into a realm

[1] Dr. John A. MacVannel, in *Teachers College Record* for September, 1905, points out some of the implications of this dualistic position as inconsistent with the general philosophical position fundamental to Froebel's system.

characterized by two very definite aims; namely, to learn to read, and to learn to write, which calls for concentration, attention, and more or less inhibition of motor activities. After the ever-shifting procession of typical experiences with their varied appeal to perceptual consciousness, and the experiences with kindergarten materials in great variety, it is almost unavoidable that there comes a period of readjustment, during which the child may assume a *blasé* attitude towards the undoubtedly simpler curriculum of the primary school. In more or less modified form, this second conception of the program governs the practice in many kindergartens at the present time. It presents strong points in contrast with the first conception, and has performed a very necessary part in the development of the work. But too strict adherence to this conception may hinder the development of the kindergarten. If the basic idea of the kindergarten is truly great, it will attest that greatness by growing, and—if need be—by outgrowing all its earlier formulas. If, in this process of growth, many Froebelian features of the kindergarten are eliminated, it is because the reach of Froebel's spirit is greater than any of its present crude embodiments.

III

The development of the Third Conception of the Kindergarten Program was conditioned by at least four prime factors: (1) that all education must be relative to the society in which it is given; (2) the scientific generalizations of evolution that resulted in a widespread interest in child-development; (3) the growth of idealism as a principle of interpretation that "affirms the organic unity of experience;" (4) a rational study of Froebel that revealed the essentially dynamic character of the principles underlying the kindergarten.

The third conception of the program, seeking a new determination for thought and action, attempts to synthesize the ideals of earlier programs into an organic unity. It interprets the generic idea in each plan—the self-activity and capacity for joyous response of the child to stimuli that obtains in the first, and the dignity and riches of typical human experience that dominates the second—to be terminal aspects of one unitary process of experience or reality, either of which is meaningless without the other. Hence, there are no hard and fast distinctions between the child as the object of the

educative process and human experience as its subject-matter. Method, by this plan, is conceived as the outcome of interaction and interrelation processes between the undeveloped human being and the facts and worths in his inheritance of race experience. In the third plan, the child is recognized as the agent of his own self-revelation and self-realization, the bearer of instincts and impulses, tendencies and aptitudes, which are the "given" dynamic factors of human life. These factors function into processes by which the individual responds to his environment and adapts it to his own developing needs. And, further, this plan recognizes civilization and society as furnishing the situations or environment into which life must function, both for its acquisition of the world of knowledge, or fact, and the world of appreciation, or interpretation.

THE PSYCHOLOGICAL BASIS

Here we are at once confronted with questions of profound import. How, or in what, does knowledge take its rise, and how account for the "feelings of meaning" which are its invariable accompaniment? What do we know of the genesis of experience, and how does the vague continuum of the child's sensory experience become differentiated into presentations of perceptual and conceptual import? The ideal course of study for the kindergarten, as for the school, waits upon the solution of these problems and others of equally obscure nature. The best that can be done is to determine, as carefully as possible, the constant factors involved in experience processes, and upon these build a working hypothesis for the kindergarten.

Experience presents three constant factors; namely, unity, activity, and development. The unity of experience exists, not for some thing, but for "a person" for whom it constitutes a possession indissolubly linked with a self that is changing, yet permanent, in an environment dominated by the same characteristics. Activity is the productive method of experience both in its changing and permanent aspects, and leads to development processes within which it is possible to discern a threefold, yet one movement: (1) the *unfolding* of individual life from within from "inner necessity"—which, in its nascent stages, functions through instinctive and impulsive forces that, under the development of reason and judgment, tend to pass into conscious control; (2) the *infolding* of an environ-

ment that is conditioned by the developed products of human experience, or civilization, to which individual experience must become adjusted. These unconscious and conscious infolding and adjustment processes make for the conservation and perpetuation of the past. (3) This movement presents the adaptive activities of the individual—the manifestation of the "propensities to variation," upon the functioning of which the progress of civilization depends, revealing man and humanity as in process of becoming.

This third movement is the limit-transcending power that enables the aspiring soul to say:

> Build thee more stately mansions, O my soul,
> As the swift seasons roll!
> Leave thy low-vaulted past!
> Let each new temple, nobler than the last,
> Shut thee from heaven with a dome more vast,
> Till thou at length art free
> Leaving thine outgrown shell by life's unresting sea.

The kindergarten philosophy accepts as its working hypothesis, the unitary character of experience in its individual and racial aspects, the solidarity and elasticity of which are maintained by its constant factors of unity, activity, and development. Education, natural and telic, is conceived as the integrating or mediating factor between the individual and racial aspects of experience. To admit the possibility of mediation is to acknowledge essential identity between the factors to be mediated. Froebel writes:

> Where mediation takes place there is aways identity in some respects at the foundation of what is mediated, but the identity appears in the opposite way; or, in other words, mediation presupposes opposition in appearance, but identity in nature—that is, mediation can only take place between and with opposites which are yet identical.

The kindergarten stands first in the system of mediating agencies of telic education. Its office is to aid the undeveloped being in his self-initiated efforts to control and interpret experience by encouraging suitable reactions to a carefully selected environment and suitable educative materials; by mediating between the home with its more or less conscious tuition of child-life on the one side, and the purposeful, conscious education of school on the other. Accepting unity as its productive principle, kindergarten procedure must have its retrospective, immediate, and prospective references. It must

avail itself of what has been formative in child-life during pre-kindergarten days, for the adequate fulfilment of present needs as preparatory to the next stage of development.

The third conception of the kindergarten program is an attempt to take the experience processes and products of early childhood and give some rational account of them as revealing the dominant characteristics of this period. These early experience processes and products are to be interpreted and evaluated by the standards of the larger experience unit—civilization. This plan assumes that the child does not come to kindergarten with an achieved self, or an organized body of experience. The child of five years of age has begun all the processes involved in achievement; but feeling is regnant, thought is conditioned by the immediate presentations of the senses, and "the child's will is his unthinking response to his uppermost idea." The young child's mental life has the character of "consecution"—to use Leibniz' word—wherein is registered an infinite number of impressions; it is a vague continuum or flow of sensational, perceptual, and very rudimentary conceptual activity.

The child's first feeble control of the course of experience lies in the activity of perceptual consciousness, with its true correlative of restless physical activity which is not merely an accompaniment of perceptual consciousness, but is the very condition of its development. In the early stages of child-development, the stream of perceptual activity flows practically unchecked through consciousness, subject to little or no evaluation save as it is detained for an instant for recognition and naming as one of the constituent objects of the environment. On this plane of development everything is equal to everything else. The child's language, play, and expressive acts mirror exactly the staccato character of his mental condition. In language, he is satisfied with a naming control of the objects he sees. In play, he contents himself with many repetitions of a new-found power or experience; such as repetitions of syllables and sounds, or repetitions of activities and movements by which the physical body becomes a part of the objective world and is thus brought gradually under control. Or again, the child moves rapidly from one amusement to another, his activities being conditioned by the presence of perceived objects. Gradually, however, the implicit unity of experience that constitutes the child's world on the plane of sensation is differentiated through perceptual activity, and becomes

increasingly explicit under the aspect of things. "The unity and distinct behavior of the individual thing is for it (perceptual consciousness), unconditional and ultimate." [8] With the emergence into consciousness of the definitely perceived object, there stirs within the individual a vague feeling of distinction between itself and the objects it perceives. This vague feeling of distinction is the dynamic factor in perception which leads to the level of conception wherein the unity of consciousness becomes organized into system and relations accompanied by the recognition of self and not-self.

A thorough study of the significance and implications of the perceptual stage of human development reveals the presence of the normative elements involved in the construction of an ideal self and an ideal world. Perceptual activity, as a factor in human development, cannot be overlooked. It must be clearly understood and used, not as an end in itself, but as a means by which experience is carried up to the level of thought, to be subjected to the constructive activities of conceptual consciousness. To use as an end would lead to arrested development on this plane. Lives of the feeble-minded and idiotic are a constant witness to control by perceptual consciousness.

Although the normal child's life is under the domination of perceptual consciousness, it needs but little observation to discern the presence of rudimentary conceptual activity. Very early, life begins to take on purposes. The child "takes himself into his own hands" and seeks to interpret and control the course of experience. His futile attempts, his hasty generalizations, and general instability of action, arising partially from his lack of perspective, gives to the purposeful education of the kindergarten its primary determinations.

In order to facilitate the self-initiated efforts of the child to control the course of experience it becomes necessary to search the past of child-life for experiences of unimpeachable validity, and, by guiding the child into some conscious control of them, begin the development of a "vigorous faith" as a basis for present achievement, and the foundation for subsequent development.[9] A retrospective reference to pre-kindergarten days shows that the child

[8] Stout's *Manual of Psychology*, p. 319.

[9] See *Commentaries of Froebel's Mother Play*, translated by Miss Blow, p. 69.

has been under the stimuli of an environment arranged mainly with reference to adult appreciation and well-being. His time has been largely spent in adult companionship; he has listened to conversations that were to him a strange jargon of meaningless words; he has witnessed behavior that was inexplicable to his reason and judgment; the world of nature has formed a part of the pageantry of life that has moved swiftly and steadily from day to day. In this "vertigo of conscious life" the child's mind has flitted with bird-like rapidity from one impression to another, while his motor response has reflected the same flitting tendency and characteristic.

The child has no organized body of knowledge to which the teacher may appeal; the kindergarten has no studies—in the narrow use of the term—as a basis for instruction and training. The experiences of pre-kindergarten days must, in large measure, furnish the subject-matter for the program, since they are fundamental to the understanding and interpretation of the immediate experiences of the kindergarten. The child has begun the life of control in response to a varied experience that he can in no adequate fashion interpret or evaluate. There must be a winnowing and sifting of these pre-kindergarten experiences, many of which are neither timely, nor worthy to become a permanent possession to the child. Nor can childish experience alone furnish the standard or principle for selection and arrangement of subject-matter for the program. This principle must be found elsewhere. It must be a principle that has enduring validity and universal application, it must be as clear when written in small characters in harmony with child-life as when written in characters that span centuries of civilization.

Turning to the child itself for a guiding principle, we can affirm that the child is human and essentially social; his world is a world of persons as well as things; his desire for recognition is, "at all times, the deepest hunger of the human soul" [10] and can be satisfied only through his reactions to persons. The child seeks to unify himself with the object of his desire by means of imitation, which is manifested in language, play, and the constructive and expressive activities. Later, his desire takes that form of "social opposition" which compels recognition by "contrasting one's self with one's fellows in behavior, in opinion and in power." [11]

[10] *Symbolic Education*, by Susan Blow, p. 112.

[11] *Outlines of Psychology*, by Josiah Royce, p. 277.

THE SOCIOLOGIC BASIS

When the child enters the kindergarten he passes into a new world conditioned by two prime factors for his development and progress in the life of control; namely, community and environment. He enters into the companionship of many children of his own age, with interests and activities relatively similar to his own; and there stirs within the child the "consciousness of kind" that gradually comes to the recognition that in his response to the common bond, the common good, the common will of the community, lies the conditions of his happiness and the fulfilment of his desires. Here, in a selected environment arranged in sole reference to child-needs, is the arena for the normal expression of the dominant activities of child-life. In the child's unconscious and conscious reactions to an environment conditioned by human interests, we may discern the working of a preponderate principle of Humanitarianism[12] as regulative of the child's efforts in the selection, arrangement, and control of the course of his experience.

Turning now to the progress of Civilization—understanding the term to mean "the organization of human life thus far attained" —for a guiding principle we may learn, from history and social philosophy, that its evolution has been marked by distinguishing characteristics in three distinct stages, none of which is obsolete; namely, the Age of Militarism, the Age of Industry, and the Age of Humanitarianism.

The Age of Militarism called for the subjugation of the self to the idea of obedience and submission to authority. Obsolete and obsolescent civilizations are a witness to the fact that within the "solid unity" of Militarism are the elements of its disintegration and overthrow. In the state of continuous warfare and in the subjugation of alien communities and peoples, which created slavery and established within society the two classes of bond and free men, we may trace the conditions that define the problem of labor and eventually developed into the Age of Industry—an age of invention wherein the boundaries of thought, space, and time receded before the interrogating, investigating spirit of humanity.

[12] The term "Humanitarian" designates the principle that all that exists is essentially bound up in the nature, needs, interests, and aims of human life. It is a productive principle that yields a progressive realization of an indwelling spiritual essence increasingly manifest in both nature and humanity.

Its characteristics are great resourcefulness and great wastefulness. To humanity it brought great benefactions as well as great perplexities and conflicts in every field of life. Its greed of material wealth and its violation of the right of property, have been, and are, the very forces that make for its reconstruction. Bondage to mechanical conditions under an Industrial régime is no more compatible with human spirit than bondage to authority and tradition under the reign of Militarism. Not only are the disintegrating and negative elements present within each age, but the dynamic elements of the freedom-seeking spirit of humanity have also been the constant factors in each age, which have carried civilization into the third and highest stage yet attained—the Age of Humanitarianism. Great benefactions, philanthropies, and great public enterprises for the uplift of humanity are among the witnesses to its reality. Not the acquisition of material wealth, nor the maintenance of material power, but the "Humanization of Mankind," is its keynote.

Again, seeking guidance in the realm of child-life, we find that his interests have taken their rise in the institution of Home and the life of the family, and in Nature as its most fruitful relationship.

Interrogating Civilization once more to ascertain the elements that have been persistently formative in the life of the race, we find that Home with its family life has been the most constant factor. Against this great source of race nurture and integrity, the Age of Militarism and the Age of Industry have beaten in vain. "The unit of the family still retains its integrity, and home is now, as it has ever been, the primary school for character of mankind." In each Age, also, Nature has been the beneficent instructor of humanity, yielding her beauty, nurture, and resourcefulness for the increasing inspiration and service of the race.[18]

Thus in the nature and needs of the child and in the arena of his little life, and also in the highest reach of civilization with its most constant factors—home and nature—is revealed the principle of Humanitarianism by which to select and arrange the subject-matter of the kindergarten program. Not only is this principle adequate as a basis for the selection and arrangement of subject-matter, it also furnishes a standard for evaluating the

[18] See *Introduction to Social Philosophy*, by MacKenzie.

instinctive and impulsive activities of the child, and may determine the selection of those most valuable and helpful to his development.

Froebel names four primary activities that reveal the nature and needs of the child and condition his development; namely, the talking, the playing, the investigating, and the drawing impulses, through the functioning of which physical, intellectual, and moral control takes place.[14] Modern psychology but corroborates this view when it subjects the total output of instinctive and impulsive activities to the test of worth in order to ascertain those that are primarily involved in the development processes, and are most available to purposive education. In broad outline they may be classified as the language, constructive, investigative, and expressive, or art impulses.[15] The child furnishes the energy; but society, through purposive education, selects the situations of human experience as the functioning medium. A single instance will suffice to illustrate this thought; the impulse on the part of the child to utter sound is manifestly self-initiated and clearly a mode of self-expression; but society, or civilization, must supply the words and invest them with meaning. Thus the kindergarten, representing the first stage of purposive education, recognizes the child as the agent of dynamic, instinctive, and impulsive forces; but the opportunities for their functioning must be supplied by the program in a selection and arrangement of the child's experiences, as containing the norm and the possibilities of development into the larger unit of race experience.

Specifically, the experiences of home, the changing aspects of nature, and the great festival days of the year, are all familiar phases of pre-kindergarten life; but through reliving them; finding them the center of common thought and action for the present life of the kindergarten; talking and playing about them, and expressing them through constructive and graphic materials, the life of conscious control of a selected experience develops and becomes a personal possession of enduring validity to each child. Keeping within the unity of home, and nature in its relation to home life, the various exercises of the kindergarten—its songs, stories, plays, games, gifts, and occupations—take on the essential

[14] *Education of Man*, pp. 49–93.

[15] See *School and Society*, by Dr. John Dewey, chap. 2.

character of studies, since they are the means by which the "individual gains control over, and help in the interpretation of his own experience." [16]

But the office of the kindergarten is not fulfilled by selecting suitable experiences and educative materials as stimuli for childish activities. The experiences of childhood must not only be organized, they must be amplified, enriched, and corrected by means of the riches of human experience as represented in art, music, and literature. In beautiful pictures, the child may see himself and his interests projected as upon a screen. In music and song the feelings of meaning that stir within the mind become articulate. In the story, which presents the known experience in an ideal form, the child may leave the field of personal experience, and enter the storehouse of race-experience, from which he may return with a measure for his own life and spirit. The movement that began in the concrete experience of the child's own world has gone out into the related unknown and returned freighted with an increase of joy in a world whose enriched content expands heart and soul, strengthens the mind, and unfolds life in power and freedom. "Thus the pupil in a great meandering circuit has returned to the home from which he started on his explorations of nature and the outer world, has returned to the center of all earthly human endeavor."[17] Out of the remembered past, in the social relationships of the present, and in the forward reach of the mind, the factors of conscious development evolve, begin their functioning, and institute the life of purposeful control of experience, marking the beginning of that ideal construction of self that fashions thought and behavior in harmony with the requirements of the environment, which includes the relationship of the individual to other selves and their relationship to him.

There is no warrant for introducing into the kindergarten, materials and experiences that have no functional value in either retrospective or immediate reference to child-development. It is conscious control of what has been and now is that constitutes the problem of the kindergarten. In the movement that harmonizes these two aspects of experience is generated the prospective refer-

[16] See "College Course in Principles of Education," by Dr. MacVannel, in *School Record*, February, 1906.

[17] *Education of Man*, p. 261.

ence of the program, since "that which is intrinsically best in any particular stage of development is the best possible preparation for the stage that is to come." [18]

The third conception of the program makes use of the gifts and occupations as means, and not as ends in themselves. In truth they are all occupations, since in the hands of children they are the means of expressing some form of human experience, whether it be building (plays with blocks), modeling in clay or sand, sewing, weaving, cutting, painting, or drawing. They are the materials by means of which the child may express himself. They facilitate physical development, and they further the development of constructive and artistic impulses. Their functional significance in furthering the processes of control is fundamental; and the structural elements of form, number, position, and direction are subordinate to the vital interests of the experience content of the program. In the natural constructive and graphic plays of children, object-forms predominate over those of knowledge—form, size, etc., or of beauty—forms of symmetry and proportion. Wherever forms of knowledge or symmetry appear they are considered incidental to the life-forms, which, from the child's standpoint, are the centralizing element throughout.

METHOD AND ITS DETERMINATION

The principle that determines the attitude towards the child, and the selection of subject-matter and educative materials, determines also the method. It is in the light of the aim of the kindergarten and its place in the educational system that method becomes intelligible as measures, or plans of action for the control of experience, initiated by the child and supplemented by guidance that distinguishes clearly between method and device.

Method is conceived as the way in which certain mentally conditioned tendencies of the child arise and gradually eliminate excessive restless and aimless response, in favor of increasingly purposeful measures of control. (This movement of method can be traced in imitative reactions, in constructive and graphic activities, in the acquisition of language, etc.) Eagerness, restlessness, and persistent action accompany the child's efforts to control experience. Herein lies the sanction of the teacher's office,

[18] *Meanings of Education*, by Dr. Butler, p. 146.

which is to devise ways and means—both in the selection and arrangement of subject-matter and in the use of educative materials —that shall facilitate the child's method of organization of experience. Device, in education, under this régime loses its stigma, since it is the teacher's plan of action in response to the child's initiative. The given experience or situation to be controlled is the factor that calls forth "rational interest." The ways and means of expression, as facilitating control of the given situation, must be absolutely conditioned by the character of the child's initiative and the nature of the given experience.

In the third conception of the program, the gifts and occupations are the ways and means used in the kindergarten for the functioning of childish activities, in which it is possible to trace the evolution of conscious purpose. Activities that begin in free play and aimless response pass into self-imitation, and from imitation of self to imitation of others. This stage is marked by increasing susceptibility to suggestion, which gradually passes into the stage wherein the will can withhold action and accept direction, until, finally, the child moves again into free play that is no longer aimless but purposeful. In the evolution of conscious purpose the child is given opportunities for inventing plans. Powers of concentration and will are exercised in executing them. Skill and judgment are constantly developed in constructive plays, and in the comparison, by the child, of the results of his own play with that of others. Method is flexible when it utilizes the child's initiations, and permits their free expression in spelling out, through play, the meanings of experience, real or vicarious. The teacher is a master of method in being "far more passive and following than categorical and prescriptive." In her dual office as guide and interpreter she can evaluate the activities of the child's experience in the light of the larger unit of race-experience; she can guide the child in the exercise of powers whose functioning best fulfils the conditions of his development; and by means of suggestion and correction she can lead the child to clearer thinking, and to consciously controlled activities.

RESTATEMENT OF AIMS AND GUIDING PRINCIPLES

It is clear, then, that the kindergarten does not exist for itself, but for a purpose. Its office is not final; it is mediatory and

transitional. Past experiences of childhood are here re-collected, reproduced, and reconstructed. The present life of the kindergarten must be reinforced and interpreted by these previously familiar experiences. Past and present experiences are, alike, to be substantialized and enriched by the related experiences of the race. Materials and devices are but ways and means to the increasing control of self and the organization of experience—and all to what end? That each child may become, in reality, what he is potentially—a center of freedom, self-controlled under conditions that he can only partially control.

Dominated by the principle of Humanitarianism, the third conception of the program finds, in the distinctly human aspects of individual and race-experience, an indissoluble unity. On the side of the individual, the differentiating and integrating factors are psychological attitudes and activities—experience-fulfilling capacities. On the side of the race, the differentiating and integrating factors are sociological activities and values. To insist that either one—the child or the race—is ultimate, is to rob the remaining one of its vital coefficient. Had the race no patrimony to transmit; had posterity no capacity to receive and transform its inheritance into an ascending knowledge and appreciation, the history of civilization, as a record of human struggle and achievement, had never been written. The educational position that recognizes the essential unity and necessary interaction between these organically related factors makes for *a wise conservatism and a rational progress.*

THE PROSPECTIVE REFERENCE OF THE KINDERGARTEN

Turning now to the prospective reference of the kindergarten under this régime, many practical questions arise. From the side of school, what are the results of this conception of the program? What benefits accrue to the child from the tuition of the kindergarten? Shall his promotion to the primary school be determined by the standards of knowledge or the standard of behavior? From the standpoint of the third conception of the program, the standard for promotion is both behavior and knowledge. First, behavior, in that the child has a developed capacity for joyous response to the demands of each new development of experience. In the kindergarten the child has had the opportunity of co-operating and

participating in a common social life with his fellows; he has acquired habits of obedience, of cheerfulness, of courtesy, of kindness; and he has been subject to conditions that called for "the gradual substitution of an integrating end of conduct, for the mere pull and push of desire, as the cause of action."[19] Second, experience—knowledge, in that the child carries into the primary school a partially organized body of experience concerning the common interests of home and nature, with a related body of songs and stories, over which he has some language and esthetic control. His ideas of number and form are concrete rather than abstract, their function having been to designate, in relation to practical ends, the educative materials of the kindergarten. Thus equipped, the child is ready to begin the conventional control of experience that characterizes the next stage of his development, which is provided for in the elementary school. It will be joy enough to read and write about the experiences with which he is familiar, and to find the activities of the kindergarten constantly enriched by the more definite lines of manual and art work. Thus, in the conventional control of the experiences of the kindergarten through reading and writing—as in the kindergarten, the child gained practical control over the experiences that were fundamental to pre-kindergarten days—one may discern the working of the productive principle of organic unity that yields progressive development. "Out of the previously familiar there emerges the quantitatively and qualitatively new experience." Thus the kindergarten fulfils its mediatory office in the scheme of purposeful education, and the separation between home and school is effectually and happily bridged.

In the meaning of the kindergarten lies its aims. Its purposes are defined in terms of humanity, and are distinctly social. It is a society in which each member is under an evolutionary process that defines the characteristic of a "socialized individual." The dominant physical activities and the mental initiations of the individual furnish the energies that make for social control; while the corporate life of the kindergarten—including its membership and all other agencies—furnishes the medium or culture ground for the development of the human, social capacities of the individual. The kindergarten seeks to preserve and make increasingly definite the

[19] *Moral Education*, by Edward Howard Griggs, p. 40.

social aspects of pre-kindergarten experience. The emphasis placed upon language and constructive and graphic expression is for social, rather than intellectual, control of experience. Intellectual control is incidental, not accidental to the social and ethical purposes. Not only are the relationships to humanity dominated by the social ideal, but human relationships to nature are presented as essentially social and ethical. It is, first, a world of beauty and appreciation, and, second, a world of act and description; neither of which can be separated from the dominant social point of view.

The impulses and "experience fulfilling capacities" are the child's own, manifested in his eager, persistent activities to control self and his environment. The kindergarten exists to recognize and encourage "the impulse to self-culture and self-instruction through self-shaping, self-observation, and self-testing." It exists to mediate to the child the stories of spiritual interests and values incarnate in human experience, by which the individual may validate and fulfil the potentialities of his being. The kindergarten is under the propulsion of the principle of unity which affirms that life is all of one piece. It is regarded as one factor in the system of purposeful education, and exists for the purpose of making the implicit unity of experience increasingly explicit and formative in the life of each member of the kindergarten, not by a process of engrafting or inoculating, but by processes of development and growth. Development is not considered as static reconstruction or reproduction, but, rather, as dynamic reconstruction and reproduction in harmony with each advancing stage of society. Growth is the factor that reveals the "essential uniqueness" of each individual, and prevents his submergence into the corporate life.

Froebel recognized the dual function of purposeful education when he wrote:

> The purpose of teaching and instruction is to bring ever more *out* of man rather than to put more and more *into* him; for that which can get *into* man we already know and possess as the property of mankind, and every one, simply because he is a human being, will unfold and develop it out of himself in accordance with the laws of mankind. On the other hand, what yet is to come *out* of mankind, what human nature is yet to develop, that we do not yet know, that is not yet the property of mankind; and, still, human nature, like the spirit of God, is ever unfolding its inner essence.[20]

[20] *Education of Man*, p. 279.

Humanization of the child as a factor in the humanization of mankind cannot take place without increasing recognition of man's dependence upon the past with its achievements, which gives validity to faith; without the realization of a present replete with opportunities for loving service; without the allurement of a future that is radiant with hope.

Such are the ideas and ideals of the third, and latest, conception of the kindergarten program. Those who are working consciously under its guidance believe it to be in accord with the best that modern philosophy and psychology have to offer to the teacher. They also believe that it is in accord with the principles of the Froebelian philosophy.

Such, then, are the three conceptions of the kindergarten program. They cannot be considered as isolated entities, but, rather, as factors in one movement that makes for the establishment of the kindergarten as a universally necessary department of purposeful education. No one claims to fully understand the meaning or significance of childhood; and when, in the progress of evolution, we pass to a higher conception of the program, led by clearer insights into the nature and needs of the child, and by deeper philosophic and psychological insights, we may still follow Froebel, since to be truly Froebelian is to follow the spirit of his life-work, rather than the letter of his imperfect system.

VI

THE HISTORY OF KINDERGARTEN INFLUENCE IN ELEMENTARY EDUCATION

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THE KINDERGARTEN'S CONTRIBUTION TO EDUCATION—IN GENERAL

The kindergarten has been one of the vital influences in American education. Its influence has been exerted along many different lines and upon many different groups of people. It forms a happy memory in the lives of the three million or more children who have participated in its procedure since the first kindergarten was opened in America. It has interpreted life from a higher standpoint to the twenty-five thousand or more young women who have taken courses in kindergarten training. It has aided the thousands of mothers who have made a study of its principles in meeting the daily problems of the home. It has enabled the Sunday-school teachers of the land to organize the religious instruction of little children upon a more fundamental basis. It has given teachers of every grade a new insight into the educational process, and has taught them to direct the development of their pupils with more wisdom than before. That the attitude of the world toward childhood has been revolutionized during the present generation; that motherhood has taken on a new and higher significance; and that primary education has been transformed in recent years largely as a result of kindergarten influence are facts so thoroughly recognized as to need but a passing mention. In enriching the lives of the children who have participated in kindergarten procedure, in interpreting the significance of motherhood anew to the women of the land, and in setting a new and different standard for the teacher, the kindergarten has rendered an invaluable service. As the value of its influence is recognized, the extension of the kindergarten has become one of the features of educational progress.

WHAT THE KINDERGARTEN HAS DONE FOR THE PRIMARY SCHOOL

Great as the value of the kindergarten may be to the children who participate in its exercises, its greatest service to education can not be rendered by the mere addition of kindergartens to the graded school system. If the principles upon which kindergarten practice is based are valid, they must be valid not alone for the stage of development which the kindergarten covers, but also for the other stages as well. The powers awakened during the kindergarten years need progressive and continuous exercise to reach the development of which they are capable, and unless the work that follows is based upon the same general principles the development is arrested. The fruit of the kindergarten tree needs a longer time to ripen than that afforded by the kindergarten years alone. The transformation that the work of the primary grades has undergone in recent years bears testimony to the recognition of these facts. The progress of the kindergarten movement is measured in part by the increasing number of kindergartens. It is measured no less by the increasing application of its principles to grade work. The multiplication of kindergartens is relatively a simple matter. The reorganization of the elementary school has been a task of far greater complexity. The kindergarten embodied a new ideal of education; it implied a different attitude toward childhood; it utilized for the child's development means other than the traditional ones; it employed different methods of procedure. The application of kindergarten principles to primary-school practice meant nothing less therefore than the reorganization of the school—the reconstruction of its ideals, the enrichment of its curriculum, the adoption of new and different methods. Since the kindergarten embodied the principles of the new educational philosophy, it alone would in great measure have effected the transformation of the school. But at the time when its influence began to be felt other forces were at work in American life—forces which created other movements destined to play a part in the transformation of American education. These movements differed in origin, aim, and scope, but all reinforced the influence exerted by the kindergarten and hastened the transformation which it would have effected. The modern primary school is the complex product of these many influences.

OTHER MOVEMENTS THAT HAVE REINFORCED THE KINDERGARTEN

While the present procedure of the primary schools bears the stamp of the kindergarten too unmistakably to leave one in doubt as to the source from which the transforming influence has come, other influences have played their part and have left their impress. Of this the art and manual-training movement, which next to the kindergarten has been the strongest influence in the transformation of the school, is an illustration. The child-study movement and the Herbartian movement of a later date are other examples of movements that have influenced the aims and methods of elementary education and left their mark upon school work. Any discussion of kindergarten influence that does not recognize these other movements and their reciprocal influence upon the kindergarten and upon each other must therefore be inadequate. To comprehend the primary school of the present it is necessary to glance briefly at its past, and at the movements that have played a part in its transformation.

THE PRIMARY SCHOOL WHEN THE KINDERGARTEN CAME

The primary school, as that term is now understood, has been in existence but little more than forty years. The system of grading that created it did not come into general use until after the Civil War. The traditional curriculum of the "Three R's" with which it began was gradually modified by the addition of new subjects, and as early as the seventies it showed signs of progress. Object-lessons had become general as a result of Pestalozzian influence, emanating from the Oswego Normal School. In 1870 drawing had been introduced into the schools of Boston. This was the indirect result of the London and Paris Expositions in 1851 and 1867, which had shown the value of art instruction as an educational factor. Although these additions had been made in the more progressive communities, formal instruction was the rule and the repression of childish activity the established form of procedure. The word method of teaching reading had, it is true, supplanted the time-honored drill in the ABC's, but with few exceptions the methods of instruction had not yet been touched by the new spirit. The musical instruction for which such books as Loomis' *First Steps* furnished the basis was formal in the extreme and the rote song

was unrecognized. The instruction in drawing was based upon geometrical principles, and had no foundation in children's native interests. Form study did not become the basis for art instruction until 1880 and not until much later did color work become a recognized feature. The free expression of the children's ideas by means of clay-modeling, paper-cutting, or painting was unknown in school work. The need of physical activity in the form of play and games, and the value of contact with nature, were also unrecognized. The teachers having the least training and experience were placed in charge of the youngest children and paid the lowest salaries. Such was the primary school in the early seventies, when the kindergarten came.

DIFFERENT INFLUENCES THAT HAVE MODIFIED ELEMENTARY EDUCATION

As has been stated, the changes that have taken place in elementary education during the past thirty or more years have been the result of many different influences. These influences may be grouped into two periods; the first beginning at about the time of the Philadelphia Exposition and continuing until about the time of the Exposition at Chicago; and the second beginning with that event and continuing until the present time. The movements exerting the greatest influence during the first of these periods were the kindergarten movement, the art and manual-training movement, and the nature-study movement. These movements continued their influence during the second period, but they were reinforced by the new psychology, child-study, and Herbartianism. The Philadelphia Exposition was a great stimulus to art education, and in a lesser degree to the kindergarten also. "Throughout all the long hundred years in which they had been building a nation, Americans had shown themselves children of utility, not of beauty," says Woodrow Wilson. "Everything they used showed only the plain unstudied lines of practical serviceability. The things to be seen at Philadelphia, gathered from all the world, awakened them to a new sense of form and beauty. Men knew afterwards that that had been the dawn of an artistic renaissance in America, which was to put her architects and artists alongside the modern masters of beauty and redeem the life of her people from its ugly severity." As a result, "an immediate wave of art enthusiasm spread over the country,"

and art instruction became a part of the school curriculum in every progressive community. The kindergarten movement also felt the stimulus of the exposition. In 1870 there were but ten kindergartens in the United States. In 1880 the number had increased to four hundred. In spite of the fact that, with the exception of those in St. Louis, these kindergartens were all private or charitable, they exerted an influence upon the school system of many a city, even upon those that did not adopt them as a part of the public school system later.

The nature-study movement had a different origin. The introduction of science into the colleges and universities had shown the necessity for cultivating the children's powers of observation during the early years; hence courses in nature study for the grades were advocated and attempted. The new interest in literature called also for the beginning of literary instruction in the elementary school, and hence the story began to receive recognition as an educational instrument. The influences that combined to reconstruct elementary education thus came from three different sources: from the industrial world, which demanded art instruction as a preparation for industrial life; from the colleges, which insisted that the proper intellectual habits should be formed and formed early; and from the educational reformers, who proclaimed the doctrines of Pestalozzi and Froebel as a means of awakening the people to a realization of education as something more than instruction in the traditional school arts.

THE DECADE OF TRANSITION—1880–1890

Since it took time for the new influences to make themselves felt, the breaking-up of the old régime did not become general until the decade between 1880 and 1890. That decade may therefore be called the decade of experiment and transition. To the uninitiated it was a decade of confusion. The addition of new subjects meant either the displacing of established ones or the overcrowding of the program—at least a disturbing of the established order. The new subjects called also for the use of new and unfamiliar methods —another element of uncertainty. Since teachers and even superintendents did not always understand the purposes of the new subjects, their relation to the traditional ones, and the methods to be used in presenting them, it is not strange that the results should

have been unsatisfactory many times, and that discontent should have been rife, both in the teaching ranks and in the community. In course of time an adjustment to the new conditions was effected. The ideals that called for new subjects and new methods were more clearly apprehended, and a new unity was worked out, both in curriculum and methods. The curriculum of the present has an organic unity of its own, based upon the experiences, the activities, and the interests of children in the different stages of development, but the school in which such a curriculum obtains is separated from the school of the eighties by an immeasurable distance. The progress made since that time is due to the kindergarten and to the movements that characterized the decade between 1890 and 1900—the new psychology, child-study, and Herbartianism. The effect of these will be touched upon later. There have been three stages, therefore, in the evolution of the modern primary school; the first, in which the old ideals prevailed; the second, in which a transition from the old ideals and methods to the new was in progress; and the third, in which the new determine both curriculum and method. But since progress has not been equally uniform in all sections of the country, schools may be found representing each of these stages. Some still embody the old ideals and have not, therefore, progressed beyond the first stage; others, the great majority in fact, have accepted the new ideals in theory, but are still struggling with the problems of their application; still others relatively few in number but constantly increasing, have satisfactorily worked out the new ideals in practice.

Toward the end of the decade between 1880 and 1890 certain positive results had been realized from kindergarten influence. The spirit and manner of the kindergartner had become the accepted standard for the primary teacher because the attitude toward childhood for which the kindergarten stands had been accepted as the true attitude. The fundamental principle of the kindergarten-education through activity had been recognized as the principle upon which primary teaching should be based, since an acquaintance with the kindergarten had shown its validity. The external features of the kindergarten—its songs and games—had been adopted in many schools. The methods of art education had been radically reconstructed as a result of its influence, and the reconstruction of the

methods in teaching music, nature-study, and physical training was well under way.

CHARACTERISTIC ASPECTS OF KINDERGARTEN INFLUENCE ON PRIMARY EDUCATION

The knowledge of educational conditions thus outlined is necessary as a background for the study of the kindergarten influence and progress. It is not difficult to see how the drawing and manual-training, or other movements have influenced the character and methods of the school. When the adoption of a new subject was decided upon, its adaptation to the several grades was carefully considered, the teachers were given instruction in the methods to be employed, and adequate supervision was provided to meet the problems of administration. In the case of the kindergarten it was very different. When kindergartens were added to the school system, a supervisor was engaged in the larger cities, it is true, but her duties seldom included instruction to the grade teachers in the methods of applying kindergarten principles to their particular work. In fact, so little direct effort was made to bring kindergarten influence to bear upon school work that one may well ask: What means did the kindergarten adopt to affect school procedure so vitally? The introduction of drawing, music, manual training, and physical exercises into the school curriculum lessened the apparent difference between the kindergarten and the school, but did not necessarily carry with it the spirit and method of the kindergarten, nor did it insure the attitude towards childhood for which the kindergarten stands. The primary teacher of the present has absorbed the spirit of the kindergarten by observation and training, though she may be unconscious of that fact. The approval which the kindergarten received compelled the teacher of the early day, steeped in the formalism that characterized the school work of that time, to acquaint herself with kindergarten procedure, and as far as possible to adopt its spirit and method. This was no easy task. Where kindergartens existed, teachers diligently visited them; where they did not exist, the teachers' only resource was the available literature of the subject or attendance at some of the summer schools, such as those conducted by Colonel Parker at the Cook County Normal School, or W. N. Hailmann, at La Porte, Indiana, that made a speciality of the kindergarten and its principles. While

the study of kindergarten theory did much to produce the change in attitude, the main source of inspiration was the kindergarten itself. The primary teacher who visited a kindergarten could not fail to be impressed by the kindergartner's attitude toward her children—by her co-operation with them in the spirit of comradeship, and by her sympathetic insight into their interests and needs. She was impressed no less by the children's attitude toward their work, by the spontaneity of their interest, and by their delight in the use of the bright-colored material. The games were a revelation to her, since they showed that there could be freedom without disorder; the interest which the children took in the kindergarten songs made her own drill on scales and intervals seem little better than drudgery; and the attractiveness of the kindergarten room gave her helpful suggestions concerning the value of beauty as a factor in education. In short, recognizing that there was possible an order of things very different from that to which she was accustomed, she determined to profit by the lesson. If kindergarten procedure could be made so interesting, why not school procedure as well? Why, she asked, should there not be pictures upon the walls and plants in the windows in the primary room as well as in the kindergarten? Why should the kindergarten children have bright-colored material and the primary children none? Why could not the songs and many of the games used in the kindergarten be used also in the primary department? The educational leaders were beginning to ask the same questions, and to urge the utilization of childish activity in the primary grades, but no arguments were half so convincing as the example of the kindergarten itself. As a result the characteristic features of the kindergarten were to a greater or less degree adopted by the school. Exercises with kindergarten material became common, and kindergarten songs and games were incorporated into the procedure of the primary school. Since the work in drawing was not based upon form-study until 1880, and color exercises formed no part of that work until many years after, the kindergarten material was a revelation to the teachers, and the gift and occupation exercises gave to many the first suggestions concerning instruction in form and color. The success of the constructive exercises carried on in the kindergarten converted many to the value and feasibility of manual training also. The expense involved in the introduction of drawing and manual training as

such had delayed that introduction in many instances; but the success of the exercises of a kindergarten character, which involved but little expense, not only familiarized the teachers with the purposes and methods of these subjects, but also prepared the public for their acceptance. Where drawing and manual training had been introduced, the efforts toward the adoption of kindergarten principles strengthened the work already undertaken. Where they had not, the attempts along kindergarten lines hastened such introduction. The children's interest in *doing* was in such marked contrast with their interest in mere learning—by the customary methods at least—that teachers and school boards could not fail to see that a new educational force had been discovered and a new vein of child-interest struck.

THE PRANG SYSTEM OF ART EDUCATION

It was along such practical lines as these that the influence of the kindergarten upon the primary school was first felt. It is a question whether the so-called application of kindergarten principles to the work of the grades meant much more to the average teacher during the decade between 1880 and 1890 than the adoption by the school of the external features of kindergarten procedure. But the mere adoption of these features led to a deeper study of Froebelian doctrines, and this in turn to an insight that resulted in better things. The fact that the kindergarten could obtain results in the line of art expression that could not be obtained by any other method had led the advocates of art instruction as early as 1880 to reconstruct the system of art education on a basis Froebelian to the core. The result was the Prang System of Art Education. The Prang System has been one of the great agencies of educational reform, and the most effective ally of the kindergarten in placing the work of the school upon an active instead of a receptive basis. Wherever the Prang system is used the principles of Froebel are disseminated. The success of the system is due in no small degree to its espousal of kindergarten principles. It has become one of the great agencies for the spread of the kindergarten gospel.

THE KINDERGARTEN SONGBOOK

But the art instruction was not the only line of work that was reorganized in whole or in part as a result of a growing insight

into kindergarten principles. The kindergarten songbook rendered an important service in carrying kindergarten influence into the school, as has been stated. Since it was the agency by means of which kindergarten games found their way into the primary schoolroom, the songbook did as much as the kindergarten material to introduce the principle of activity into primary education. But acquainting primary teachers with kindergarten games was but a part of the service the songbook rendered. It showed a new conception of the function of music in a child's development, and of the methods by which that development should be secured. The kindergartner maintained that this development depended upon the cultivation of musical feeling, and that this made the hearing of good music adapted to the child's comprehension, indispensable. This practically created the child's song and brought the rote song into use as an educational instrument. She maintained further that the appreciation of rhythmic exercises and participation in them is essential, and that such exercises should therefore have a place in the kindergarten program. She further insisted that opportunity for the interpretation of music should also be given, and that there should eventually be creative expression in music, as there is such expression in other lines. But if these ideas were to obtain in the music-teaching of the grades, a new system of ideals and methods was needed. The principles in question were gradually recognized, and a reorganization of the music-teaching in the grades was undertaken. Such a reconstruction was hardly more than conceived of, however, during the decade in question; in fact, it has been but partially effected, even yet. Because the kindergarten songbook suggested such a reconstruction, and introduced games and dramatizations into the grades, it has been one of the main agencies for the spread of kindergarten influence. Wherever it has gone it has carried the kindergarten spirit—the sympathetic interpretation of childhood, the love of nature, and respect for human activity, whatever its form.

THE KINDERGARTEN GAMES IN THE PRIMARY SCHOOL

The use of the kindergarten game in the primary school led to the reorganization of another line of work also. The physical needs of school children have received but scant consideration at the hands of school authorities, but about the middle of the decade

under consideration gymnastic exercises were introduced into the schools of all the larger cities. But the spirit with which the children entered into the games, in marked contrast with the spirit manifested in the formal exercises, showed plainly that this branch of school work had not yet been placed upon a proper foundation. That there was needed a course of physical training in which games appropriate to the different grades should have a place was readily seen. Such a course was not worked out during the decade in question. Like the needed reorganization in musical lines, it is hardly worked out even yet, but much thought has been given to it in recent years.

THE KINDERGARTEN AND NATURE-STUDY

In the line of nature-study, too, the kindergarten suggested new ideals and methods. That such study was successful when the emphasis was placed where the kindergartner placed it—upon the care and observation of living plants and animals, upon gardening, and excursions to see Nature at work in her own time and way—all this the kindergarten had abundantly demonstrated. In consequence the organization of nature-study courses for the grades along the above mentioned lines was undertaken. Little was accomplished until after the decade under consideration had passed, but the new insight gained was not lost.

SIGNIFICANCE OF THE DECADE, 1890–1900

As has been stated, the decade between 1880 and 1890 was a significant one in the history of elementary education, because it saw the inauguration of many new features in school work. The decade between 1890 and 1900 was even more significant, since it saw the rise of other movements destined to give a more fundamental insight into the ends and means of education, those of the kindergarten included. The literature of the kindergarten had familiarized the public with the conception of education as a process of continuous development—a process in which the child's creative activity must play an important part. This doctrine had been impressed upon the teachers of the country with rare force by Colonel Francis W. Parker, who embodied in himself the attitude toward childhood which the new education represents, and who probably did more than any other single individual in the United

States to bring about the acceptance of the new educational doctrines in their application to the grades. At the beginning of the decade in question the doctrine of education as a process of continuous development received a signal reinforcement from the teaching of the new psychology that was beginning to make itself felt—the psychology of Dewey, James, Hall, and others. This was the product of the new spirit in the colleges, the spirit of the inductive sciences. The biological sciences had laid the foundation for the knowledge the new psychology proclaimed namely, that the development of the child falls into well-marked stages, and that education to be valid must be based upon the interests and activities of these different stages. This was what the exponents of the kindergarten had been proclaiming, to be sure, but many who had been unwilling to accept the Froebelian doctrine, based upon insight rather than upon scientific method, accepted these same doctrines without question when their correctness was thus established. The Froebelian principle of creative activity also received a confirmation no less marked. A fuller knowledge of the nervous system gave a new insight into the mental processes, and had therefore thrown added light upon the nature of true educational procedure. The recognition of the part that the motor activities play in development gave a new significance to physical exercise, to games and plays, to manual training and art work, and to nature-study in the form of gardening and excursions. The child's mental image became a recognized means of education, and the free expression of his images a necessary part of the educational process, not alone in art work but also in music, language, and other forms of school effort.

GENETIC PSYCHOLOGY AND THE CHILD-STUDY MOVEMENT

The child-study movement, which was the natural outgrowth of the new psychology, attempted a task which would have been of inestimable value had it been satisfactorily completed—the gathering of a body of facts concerning the nature and growth of children at different stages upon which a true science of education might ultimately be built. Much of value was accomplished, although the most important part of the work—the sifting and organizing of the collected data—has never been satisfactorily completed. The movement gave an added stimulus to the study of psychology as a basis for education, however, aided in the reor-

ganization of many phases of educational procedure, destroyed the tendency toward the blind acceptance of educational doctrines whatever their source, and led to an appreciation of the new educational movements that would have been impossible before. To many it gave their first insight into the nature and purpose of the kindergarten; to others it reinterpreted the Froebelian doctrines and gave them a broader significance.

The psychological movement, of which the child-study movement was a part, had a most important bearing upon the progress of the kindergarten as such and upon the application of its principles to grade work. But before this can be discussed another movement that had an important bearing upon American education must be considered. This is the Herbartian movement. The new psychology, child-study, and Herbartianism were the three influences that shaped the educational thought of the decade. The general character of that thought has determined in a large measure the form that kindergarten procedure as such has taken, as well as the form that the application of kindergarten principles to grade work has assumed.

THE HERBARTIAN PEDAGOGY

The character of German pedagogy during recent years has been determined largely by the influence of Herbart, and in view of Germany's leadership in education it is not strange that her pedagogy should have influenced education in the United States. The psychology of Herbart has found little or no acceptance among American educators, but the practical value of certain phases of Herbartian doctrines aroused considerable interest. For a number of years there was hardly an educational meeting of importance in which a discussion of those doctrines was not given an important place. In the thorough weighing which Herbartian doctrines have thus received, many have been found wanting in value for American education, but some have been given deserved recognition. Herbart's psychology has not stood the test of modern thought, but his doctrine of apperception is conceded to be one of the most important contributions to recent pedagogical science. The Culture Epoch Theory associated with his name has been rejected as the foundation for the American school curriculum, but the thought that the curriculum of the elementary school should have a character-building content has given history, literature, and nature-study a permanent

place in grade work and made a return to the curriculum of the "three R's" forever impossible. A school program based upon the Herbartian principle of correlation may have been found impracticable, but the attempts in that direction did much to make the curriculum an organic whole instead of a mere collection of unrelated subjects. The doctrine of interest may have needed the modification it received at the hands of American psychologists, but it has done much to give a more fundamental character to education. The movement in general reinforced the theory of stages in a child's development, but it considered them from another point of view—that of subject-matter appropriate to each. The doctrine of creative self-activity this movement did not recognize, and in this respect it was out of harmony with the educational theory in process of formation as a result of other tendencies. By its discussion of the essential steps in the teaching process Herbartianism rendered a most valuable service to pedagogical science and placed classroom instruction upon a new and higher level. Altogether the Herbartian movement must be considered one of the most stimulating influences in American education.

GROWTH AND DIVISION: TWO SCHOOLS OF KINDERGARTNERS

The kindergarten, which was becoming a part of the school system while these movements were in progress, could not fail to be influenced by them, both directly and indirectly. Although the attention paid to the newer movements seemed to relegate interest in the kindergarten to the background, in reality it was making most remarkable progress. In 1890 it had secured a legal foothold in less than half a dozen states; at present, kindergartens can be established at public expense in half the states of the Union. In 1890 five or six of the larger cities and twenty-five or thirty of the smaller ones had adopted the kindergarten into the school system; in 1902 public-school kindergartens were reported in four hundred and forty. In 1890 not more than six of the state normal schools of the country had established kindergarten training departments; at present such departments have been organized in more than fifty. This growing incorporation of the kindergarten into the school system had consequences that were far reaching. Had it remained outside of the school system, it might have remained uninfluenced by the movements that were shaping general educa-

tion; its introduction into the school system made its modification inevitable. Before the advent of the new psychology kindergarten procedure had been considered the ideal which school practice should emulate. But while the psychologist had pronounced favorably upon the kindergarten as a whole, and thus established it more firmly than ever in the confidence of the people, he by no means approved of the kindergarten doctrine in its entirety, nor of all the phases of kindergarten practice. Since he recognized no authority except that furnished by his own or kindred sciences, he assumed an attitude more or less critical, considered that much of the work with the gifts and occupations required an exactness detrimental to young children, and declared a reconstruction of its theory and practice necessary. When the kindergarten became a part of the public-school system, these criticisms were brought to bear upon its practice as they would not have been had it remained a separate institution. The school superintendents of the country, versed in psychology and educational theory in general, acquainted the kindergartners with the newer views and frequently insisted upon such a modification of established procedure as the newer views demanded. When such modifications first began to appear, the kindergartners who had not themselves felt the pulse of the general educational movements considered such deviations from established procedure as nothing more than a "failure to understand Froebel." When the modifications became more general, those advocating them were regarded as misguided individuals who had forsaken the true gods and affected an unholy alliance with the worshipers at other shrines. But as the differences became more apparent the kindergartners of the country began to ally themselves either with those who approved the changes in progress on the one hand, or with those who were opposed to them on the other. The ultimate result was the division of the kindergartners of the country into conservatives and liberals, the former clinging to the established interpretation of Froebelian doctrine and the mode of kindergarten procedure that Froebel is supposed to have followed, and the latter accepting the new interpretation and modifying the procedure on the basis of the criticisms made. Fearing that the lack of agreement in the kindergarten ranks might work injury to the kindergarten cause as a whole, the International Kindergarten Union in 1903 appointed a committee, known as the Committee of Nineteen,

to inquire into, and if possible reconcile, the differences that had grown up. The committee was composed of leading representatives of both the conservatives and liberals, as well as of those known to occupy middle ground. Several most profitable meetings have been held, but the work for which the committee was organized has not yet been completed. Those who hoped for a reconciliation of the opposing schools of kindergarten interpretation as a result of the committee's deliberations, however, will doubtless be disappointed, since the conservatives have been unwilling thus far to accept the conclusions of modern psychology upon which the liberal views are based, and the liberals are equally unwilling to return to views which they feel that they have outgrown. The report of the committee's work cannot fail to be a most valuable contribution to kindergarten literature.

Although many kindergartners have not yet accepted the views for which the liberal kindergartners stand, the logic of events points to their ultimate acceptance if the kindergarten is to become an organic part of the American school system. The progressive kindergartner considers that psychology and child-study are but elaborating the principles which Froebel himself recognized as clearly as the knowledge of his time would permit, and that the added insight of the present but furnishes the means of perfecting the institution which he did not live to complete. She therefore welcomes the light which modern science has thrown upon the development of the child's body, even though it necessitates the reorganization of the games which Froebel considered adequate for its development. She recognizes the value of the idea upon which the system of gifts and occupations is based—that of carefully organized impressions to be followed by adequate expression; but psychology has taught her that much of the customary work with both gifts and occupations requires an exactness injurious to undeveloped nerves and muscles. Her faith in creative activity as the fundamental article in the kindergarten creed has not been shaken, but she considers work creative only when it is the expression of the child's own image. She accepts the Froebelian doctrine of the value of beauty in awakening the child's higher nature, but her study of art has shown her that the customary work with the gifts and occupations would not lead him to a recognition of true beauty. She yields to no one in her belief that children may be prepared

for the appreciation of spiritual truths early, but she can accept the kindergarten doctrine of the symbol as a means of doing so in its modern interpretation only. In these and other respects the liberal, or progressive, kindergartner considers that there is opportunity for great improvement, both in the theory of the kindergarten and in its practice. In general she is willing to submit both to the test of modern educational insight knowing that what is of true value will not be overthrown.

INFLUENCE AND PLACE OF THE MODIFIED KINDERGARTEN

But what effect has the modification of kindergarten thought and practice had upon the progress of the kindergarten as such, and upon the application of its principles to grade work? A most gratifying one in every way. The kindergarten had been accepted by the American people before it received the sanction and the criticism of the psychologists, but it was a thing apart from the school, in aim, material, and method. Psychology rediscovered the principles upon which kindergarten procedure is based and gave them a universal significance. It therefore broke down the wall of separation between the kindergarten and the school, and laid the foundation for their ultimate unification. So thoroughly are the principles of psychology in accord with the fundamental principles of the kindergarten that, had there been no kindergarten to begin the transformation of the school before the advent of the new psychology, a transformation akin to that which was in progress would have been effected sooner or later by that movement alone; and had Froebel failed to devise the kindergarten as the first stage in a system of educational procedure, his American successors—the exponents of the new psychology—would have been obliged to do so. It is not strange therefore that the kindergarten itself should have made more rapid progress during the past few years than ever before and that its principles should receive increasing recognition. The battle for its existence in American education was fought and won at an earlier stage; the greater battle for the application of its principles to general educational procedure was won with the new interpretation of its doctrines, and the inauguration of the new modes of procedure. Dr. Richard G. Boone says: "Should the kindergarten be everywhere abandoned as a part of the school machinery, it would still remain in spirit as a determining factor in every other

part of the system, and in no less than a decade the kindergarten itself would have reclaimed its recognition and place—so vital is it in current educational thought."

PRESENT PROBLEMS AND PRESENT STATUS

The acceptance of an educational theory is an easy matter. The application of that theory to existing conditions is a more difficult one. The adoption of the kindergarten as a part of the American school system has given rise to many problems that have not yet been satisfactorily solved. The mere adjustment of the kindergarten as such to the school as such has raised many difficulties in administrative work, but these need not be discussed here. The reorganization of practice in the kindergarten itself presents other problems, those which the superintendent and the kindergartners must work out together. The application of kindergarten principles to primary-school practice presents still other and greater difficulties. It calls for the co-operation of all the educational forces, and success can be hoped for only when superintendent, kindergartners, primary teachers, and teachers of special subjects work with intelligent insight toward a common end. But what are the fundamental principles whose application is to be effected? These have been differently stated; H. Courthope Bowen considers "that the doctrine of creativeness—the practical application of the principle of self activity—together with the doctrine of continuity and connectedness, forms the true heart of Froebel's system." It is the doctrines of continuity and connectedness combined which have reconstructed the primary curriculum during recent years, on the basis of the child's fundamental interests and activities at successive stages, and the doctrine of creative self-expression that has reorganized existing methods in art, music, manual training, language-teaching, and kindred forms of school work. The result is the primary school of the present, the school in which, according to Dr. Monroe, "the emphasis is placed upon the activities of the child rather than upon the technique of the process of instruction, and where development of character and personality is sought rather than the mere impartation of information and the training of intellectual ability." In such a school, "the materials of instruction, if they are really and vitally to produce the development of the child's mind and nature, must be selected from life as it now is, and as it

affects the child and comes within his comprehension," says Dr. Monroe further. And if the school in question be thoroughly Froebelian, the method as well as the material of instruction must be the result of the child's thought and experience, it must be the method of creative self-expression. There is many a primary school today in which these principles are intelligently applied, and which is therefore as truly Froebelian as the best kindergarten. There is many a primary teacher, too, who is as genuinely a child-gardener as the kindergartner herself, and who is doing as much as the kindergartner to further the cause of kindergarten progress.

CONCLUSION

The kindergarten has thus exerted a most vital influence upon American education; but the transformation of the school that it is capable of effecting has hardly more than begun. The list of cities in which the kindergarten has been adopted is a creditable one, but it is small compared with the list of those in which such adoption has not yet been effected. The schools in which the doctrines of Froebel are applied are doubtless increasing, but those that give no evidence of having been influenced by those doctrines are still too numerous. The educational movements of the present are all in accord with, or the result of Froebelian doctrines. As the new movements are more fully comprehended, the logic of events points to a great extension of kindergarten influence in the near future. The furthering of that influence should be the aim of all who have the highest interests of American education at heart.

MINUTES OF THE MEETINGS HELD IN CHICAGO, FEBRUARY 25 AND 27, 1907

Monday evening, February 25.—"The Certification of Teachers" was the topic for discussion. Dr. Cubberley's carefully prepared monograph on this subject had been studied by many of the members present. This was particularly true of those who had indicated in advance their intention to discuss some phase of the subject. The discussions were therefore valuable. The following members took leading parts in the discussion:

Dr. Reuben Post Halleck made a short introductory talk, in which he called attention to the important work the National Society is doing, and to the importance and timeliness of the topic under discussion. He emphatically announced himself as opposed to any educational policy that discourages or denies "free trade in brains," as does the prevailing system of certification of teachers.

Dr. Henry Suzzallo opened the discussion of the *Yearbook* in place of Professor Cubberley, who was detained because of sickness. He set forth in a direct and clear way the main points in the *Yearbook,* thus opening the subject in an excellent way for further discussion.

The discussion that followed Dr. Suzzallo's introduction dealt with various prominent phases of the subject. Some parts of it would be valuable matter for the *Yearbook,* and hereafter an attempt will be made to have stenographic reports, or to have the speakers write out their discussions soon after the meetings. The following members took prominent parts: Dr. Charles DeGarmo, Cornell University; Superintendent J. M. H. Frederick, Lakewood, Ohio; Professor John F. Brown, University of Wyoming; Professor Edwin G. Dexter, University of Illinois; Professor G. W. A. Luckey, University of Nebraska; Professor Edward F. Buchner, University of Alabama; Superintendent J. Stanley Brown, Township High School, Joliet, Ill.; Superintendent C. P. Cary, of Wisconsin (Mr. Cary was the only speaker that took definite issue with the idea of state centralization as the best means of improving the prevailing system of certificating teachers); H. A. Hollister, University of Illinois; Charles H. Keyes, Hartford, Conn.; Super-

intendent H. M. Slauson, Ann Arbor, Mich.; and B. C. Moore, superintendent of McLain County, Ill.

Motion was made to adopt a recommendation of the Executive Committee that a committee of three be appointed to promote more effective legislation and administration of certification and professional improvement of teachers in the several states. Amendment to make the number on the committee four was carried, and the motion passed unanimously.

Professor Dexter moved that a committee of one be appointed to report an appropriate expression of the National Society in remembrance of the late Dr. Wilbur S. Jackman. Carried. Dr. C. A. McMurry was later appointed as this committee, to report at the Wednesday evening meeting.

Wednesday afternoon, 4:30 o'clock.—This was the annual business meeting, and no attempt was made to take up the discussion of "The Vocational Studies for College Entrance," which was the topic announced for this meeting. Postponement of this discussion was necessary because of the inability of many members who were interested to attend. Before adjourning there was some continued discussion of the certification of teachers.

The Committee on Nominations reported as follows:

For President—Stratton D. Brooks.

For Secretary-Treasurer—Manfred J. Holmes.

For place made vacant on Executive Committee by making Superintendent Brooks President—Reuben Post Halleck (one year).

For the two new members of Executive Committee—J. Stanley Brown and Henry Suzzallo.

The following recommendation of the Executive Committee was adopted; namely, that, in addition to necessary expenses, the Secretary of the Society be allowed the sum of $100, to be paid out of such funds as shall remain in the treasury after all other regular expenses are met.

The following persons were elected to active membership at the Chicago meetings:

George A. Axline, president State Normal School, Albion, Idaho.
Professor Frederick G. Bonser, State Normal School, Macomb.
Mrs. Mary D. Bradford, Stout Training Schools, Menomonie, Wis.
George A. Brown, editor *School and Home Education,* Bloomington, Ill.
Superintendent Arthur D. Call, Hartford, Conn.

Professor Edward C. Elliott, University of Wisconsin, Madison, Wis.

Superintendent L. D. Harvey, The Stout Training Schools, Menomonie, Wis.

Superintendent Warren E. Hicks, Cleveland, Ohio.

Superintendent James F. Keating, Pueblo, Colo.

Superintendent Charles H. Keyes, 82 Wethersfield Ave., Hartford, Conn.

Miss Anna E. Logan, Principal Ohio State Normal, Oxford, Ohio.

George H. Martin, Secretary Massachusetts Board of Education, Boston, Mass.

Superintendent J. V. McMillan, Marietta, Ohio.

Professor A. S. Olin, University of Kansas, Lawrence, Kan.

Frank H. Palmer, editor *Education*, 50 Broomfield St., Boston, Mass.

Professor Walter D. Scott, Northwestern University, Evanston, Ill.

Professor George D. Strayer, Teachers College, New York, N. Y.

Professor Harry K. Wolfe, University of Nebraska, Lincoln, Neb.

Wednesday evening, 8:00 o'clock.—The Wednesday evening session proved an excellent one. "Vocational Studies for College Entrance" was the topic for discussion. Here again some of the contributions to the discussion would be valuable material for the *Yearbook*. Theodore de Laguna, George D. Strayer, W. S. Sutton, Dean James E. Russell, David S. Snedden, M. V. O'Shea, Jesse D. Burks, E. L. Thorndike, Charles McKenny, and others took leading parts.

It was proposed at this meeting that the committee to conduct this study of the vocational studies for college entrance be continued and enlarged; and that a working basis be established for recognition of vocational studies for entrance credit. The Executive Committee took this under advisement.

An appropriate expression of appreciation of the work and life of Dr. Wilbur S. Jackman, and sorrow for his untimely death, was adopted.

MANFRED J. HOLMES, *Secretary*

DISCUSSION—MAKING ROOM FOR VOCATIONAL STUDIES

THEODORE DE LAGUNA
University of Michigan

Certain comments which Mr. Herrick makes upon my paper on "Vocational Studies" in the *Sixth Yearbook* of this society show that I did not succeed in making my position sufficiently clear; and I take this opportunity of adding the apparently necessary explanation.

I. In the first place, it is not to be understood that the entrance requirements of the University of Michigan are less in amount than is usual among the better colleges of the country. Had that been the case, I should not have taken them as an example. The fifteen units which are required are based upon the usual estimate of four *or* five recitation periods per week for a school year, for each unit. If five periods per week are given to every study throughout the school course, it is obvious that, with four recitations daily, sixteen units can be completed in the four years—one more than is required. If, on the other hand, the lesser allowance of four periods per week for each study is made, twenty units can be completed in the same period—five more than is required. That is to say, five studies, to each of which is allotted four recitations per week, can be carried on with four recitations daily, if each study is omitted on a different day of the week. Furthermore, if, as seems more reasonable, half the units were put upon the five-hour basis, and half upon the four-hour basis, eighteen units can be completed in the four years—three more than is required.

II. It was with these facts in mind that I wrote: "The well-organized high school can easily, if its administrators so desire, devote four or five periods a week to such [vocational] subjects throughout the entire course, and still *contrive to meet* the college entrance requirements." The words which I now italicize were evidently overlooked, and the statement was taken to be a general recommendation. I did not so intend it. It was meant to indicate the *practical maximum within which a wise middle course might be found;* for I take it for granted that not more than four recitations a day (or their equivalent) should be required of any high-school student. Now, just how much in the way of vocational study can be thus inserted without overcrowding the curriculum would, I suppose, depend upon the particular subjects in question. In the case of various branches of manual training, and especially in the case of agriculture and the allied pursuits, I should unhesi-

tatingly recommend the maximum. The commercial studies, however, being sedentary in character, could not easily be given so large a place. I dare say that not more than two or three units of such work could be thus provided for without serious danger.

If, then, a greater amount of commercial work is desirable in the case of a certain class of high-school students who are intending to go to college, the question arises how it may best be given a place. As my paper indicated, I should answer this question, not by advising the substitution of commercial studies for any part of the already meager and inadequate theoretical course, but by advising the extension of the high-school period so as to include the seventh and eighth elementary grades. And in this I believe that I am in accord with the most trustworthy current opinion. The difficulty is not one in which the middle schools need help from the universities, but one in which they can best help themselves.

I should add that I see no reason why political economy should be regarded as a vocational study any more than physics or chemistry. On the contrary, it is a fundamental theoretical science; and, considering the universal demand for it in American civic life, I believe that it would be an excellent policy to encourage the beginning of its study in the high school